

**This label has been updated according to the re-evaluation decision of lambda-cyhalothrin RVD2021-04. While users are encouraged to follow this updated label immediately, the previously approved label is valid until 29/04/2023 in accordance with the phase out period set out in RVD2021-04. This previously approved label will be provided upon request by emailing [hc.pmra.info-arla.sc@canada.ca](mailto:hc.pmra.info-arla.sc@canada.ca). In your email please include the product name and Registration number of the label you are requesting.**

## DEMAND® CS Insecticide

COMMERCIAL

MICROCAPSULE SUSPENSION

**ACTIVE INGREDIENT:**

Lambda-cyhalothrin ..... 100 g/L

Contains 1,2-benzisothiazolin-3-one at 0.1% OR 5-chloro-2-methyl-4-isothiazolin-3-one at 0.00089%, 2-methyl-4-isothiazolin-3-one at 0.00029% and 2-bromo-2-nitropropane-1,3-diol at 0.02% as preservatives.

**READ THE LABEL AND ATTACHED PAMPHLET BEFORE USING  
KEEP OUT OF REACH OF CHILDREN  
SHAKE WELL BEFORE USE**

**POTENTIAL SKIN SENSITIZER  
CAUTION: EYE IRRITANT**

REGISTRATION NUMBER: **27428**  
PEST CONTROL PRODUCTS ACT

NET CONTENTS: **235 mL to 10 L**

**Syngenta Canada Inc.**  
140 Research Lane, Research Park  
Guelph, Ontario N1G 4Z3  
Telephone: 1-877-964-3682

**LABEL**

## 1.0 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.

## 2.0 FIRST AID

**IN CASE OF POISONING**, contact a physician or a poison control centre **IMMEDIATELY**. 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. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person.

**If on skin or clothing**, take off contaminated clothing. Rinse skin **IMMEDIATELY** with plenty of water for 15 – 20 minutes. Call a poison control centre or doctor for treatment advice.

**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 5 minutes, then continue rinsing eye. 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.

## 3.0 TOXICOLOGICAL INFORMATION

Contains petroleum distillates. Vomiting may cause aspiration pneumonia. Treat symptomatically.

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

## 4.0 PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN AND ANIMALS.

May irritate eyes. DEMAND® CS Insecticide is a potential skin sensitizer. In case of exposure to skin or face or other sensitive areas, some individuals may feel a tingling or numbness. This is a transitory effect and does not cause harm to skin. Avoid splashing in eyes or on skin, particularly the face. If hands are contaminated, wash with soap and water before touching other areas of skin.

### **For Interior and Exterior Structural and Exterior Perimeter (Barrier) Pest Control Uses**

When making an application to vinyl or wooden surfaces, treat a small area and allow to dry. Some types of vinyl or wooden surfaces, particularly if aged, may show some staining after application of DEMAND CS Insecticide.

**DO NOT** apply as a space spray.

**DO NOT** apply as a broadcast, perimeter or spot treatment to indoor residential structures. A residential structure is one where the general public, including children, could be exposed during or after application. Residential structures include, but are not limited to, homes, garages, schools, restaurants, hotels/motels, public buildings or any other structures where the general public, including children may potentially be exposed.

**DO NOT** apply to overhead areas or in confined spaces without appropriate respiratory and eye protection.

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

**DO NOT** allow spray to drip or allow drift onto non-target surfaces.

Care should be taken to avoid the pesticide exiting the void. Any residue deposits on non-target surfaces must be removed by the applicator.

**DO NOT** apply this product in any room being used as living, eating, sleeping or recovery area by patients, the elderly, or infirm when they are in the room.

**DO NOT** apply to soft surfaces of furniture, mattresses, linens, pet bedding, toys or clothing.

For hard surface furniture, treatments to dressers or other areas (for example, closets) listed on the labels where clothes, toys, towels and other items are stored, apply only to junction points and cracks and crevices. Broadcast, perimeter or spot treatments are not permitted. Remove all objects before treatment. Any residues deposited on non-target surfaces must be removed by the applicator. Treated areas must be dry before replacing stored items.

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

**DO NOT** allow people or pets or livestock to enter treated areas until sprays have dried.

**DO NOT** apply this product to edible growing crops or stored raw agricultural commodities used for food or feed.

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

**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 them following treatment.

#### **For Turf and Outdoor Ornamental Uses**

Do not use in residential areas. Residential areas are defined as any use site where bystanders including children could be exposed during or after application. This includes homes, schools, public buildings, or any other area where the general public including children could be

exposed.

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.

**Restricted Entry Intervals: DO NOT** enter or allow worker entry into treated areas during the intervals specified in the following table:

<b>Crop(s)</b>	<b>Post-application Activity</b>	<b>REI</b>
Turf (Golf Courses)	All activities	Until sprays have dried
Turf (Sod Farms) Outdoor Ornamentals	All activities	12 hours

## 5.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

### For Interior and Exterior Structural and Exterior Perimeter (Barrier) Pest Control Uses

When applying this product workers should wear long pants, long-sleeved shirts, and chemical resistant boots and gloves. In addition, during mixing, loading, clean-up and repair activities, workers must also wear chemical resistant gloves and safety goggles or a face shield. Avoid touching face with contaminated gloves or clothing. Wash gloves before removal.

For applications using mechanically-pressurized or power operated hand-held equipment, also wear chemical-resistant coveralls and a respirator with a NIOSH-approved organic-vapour-removing cartridge with a prefilter approved for pesticides OR a NIOSH-approved canister approved for pesticides during mixing, loading and application. DO NOT handle more than 7.2 L per day. This restriction is required to minimize exposure to the worker. Applications may be required over multiple days or using multiple applicators.

### For Turf and Outdoor Ornamental Uses

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. Gloves are not required during application within a closed cab.

For outdoor ornamentals, when handling more than 1.1 L per person per day using mechanically-pressurized handheld equipment, also wear a respirator with a NIOSH-approved organic-vapour-removing cartridge with a prefilter approved for pesticides OR a NIOSH-approved canister approved for pesticides during mixing, loading and application.

For application to outdoor ornamentals using handheld airblast/mistblower equipment, wear chemical-resistant coveralls with a chemical-resistant hood over long-sleeved shirt, long pants, chemical-resistant gloves, socks, chemical-resistant footwear and a respirator with a NIOSH-approved organic-vapour-removing cartridge with a prefilter approved for pesticides OR a NIOSH-approved canister approved for pesticides. DO NOT handle more than 51 mL per person per day. This restriction is required to minimize exposure to the worker. Applications may be required over multiple days or using multiple applicators.

## **For All Uses**

Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Wash splashes from skin IMMEDIATELY with plenty of water. Remove PPE immediately after handling this product. Wash the outside of gloves with soap and water before removing. As soon as possible, wash thoroughly and change into clean clothing. After spraying, wash hands and shower thoroughly with soap and water.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Wear freshly laundered clothes daily.

## **6.0 ENVIRONMENTAL PRECAUTIONS**

### **For Exterior Perimeter (Barrier) Uses**

Toxic to aquatic organisms.

**DO NOT** allow applications to contact water inhabited by fish, such as in aquariums and ornamental fish ponds that are located around structures being treated.

Toxic to bees. Avoid application around blooming plants.

### **For Turf and Outdoor Ornamental Uses**

Toxic to aquatic organisms. Observe 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 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. Avoid applications when bees are foraging in the treatment area in ground cover containing blooming weeds. 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.healthcanada.gc.ca/pollinators](http://www.healthcanada.gc.ca/pollinators)).

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.

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.

To reduce risk to aquatic organisms from runoff, a vegetative filter strip of at least 10 metres wide between the field edge and adjacent, downhill aquatic habitats must be observed, as

specified under DIRECTIONS FOR USE

This product contains an active ingredient and aromatic petroleum distillates, which are toxic to aquatic organisms.

## 7.0 STORAGE

Keep unused product in original container tightly closed, locked up and away from food.

Store in a cool, well ventilated area away from food or feed and out of the reach of children and animals. Store above 0°C. Shake well before use.

## 8.0 DISPOSAL

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

### **Recyclable Containers**

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

***IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING,  
CALL 1-800-327-8633 (FASTMED)***

<b>GROU P</b>	<b>3</b>	<b>INSECTICID E</b>
-------------------	----------	-------------------------

## **DEMAND<sup>®</sup> CS Insecticide**

COMMERCIAL

MICROCAPSULE SUSPENSION

**ACTIVE INGREDIENT:**

Lambda-cyhalothrin ..... 100 g/L

Contains 1,2-benzisothiazolin-3-one at 0.1% OR 5-chloro-2-methyl-4-isothiazolin-3-one at 0.00089%, 2-methyl-4-isothiazolin-3-one at 0.00029% and 2-bromo-2-nitropropane-1,3-diol at 0.02% as preservatives.

**READ THE LABEL AND ATTACHED PAMPHLET BEFORE USING  
KEEP OUT OF REACH OF CHILDREN  
SHAKE WELL BEFORE USE**

**POTENTIAL SKIN SENSITIZER  
CAUTION: EYE IRRITANT**

REGISTRATION NUMBER: **27428**  
PEST CONTROL PRODUCTS ACT

**Syngenta Canada Inc.**  
140 Research Lane, Research Park  
Guelph, Ontario N1G 4Z3  
Telephone: 1-877-964-3682

**PAMPHLET**



**TABLE OF CONTENTS**

	<u>Section Number</u>
<b>NOTICE TO USER .....</b>	<b>1.0</b>
<b>FIRST AID .....</b>	<b>2.0</b>
<b>TOXICOLOGICAL INFORMATION .....</b>	<b>3.0</b>
<b>PRECAUTIONS.....</b>	<b>4.0</b>
<b>PERSONAL PROTECTIVE EQUIPMENT (PPE).....</b>	<b>5.0</b>
<b>ENVIRONMENTAL PRECAUTIONS.....</b>	<b>6.0</b>
<b>STORAGE .....</b>	<b>7.0</b>
<b>DISPOSAL .....</b>	<b>8.0</b>
<b>PRODUCT INFORMATION .....</b>	<b>9.0</b>
<b>Structural and Perimeter Pest Control.....</b>	<b>9.1</b>
<b>Interior Uses.....</b>	<b>9.1.1</b>
<b>Exterior Uses.....</b>	<b>9.1.2</b>
<b>DIRECTIONS FOR USE .....</b>	<b>10.0</b>
<b>General Information .....</b>	<b>10.1</b>
<b>For Turf and Ornamental Uses .....</b>	<b>10.2</b>
<b>Ground Application .....</b>	<b>10.3</b>
<b>Airblast Application.....</b>	<b>10.4</b>
<b>Mixing Instructions.....</b>	<b>10.5</b>
<b>How to Apply .....</b>	<b>10.6</b>
<b>Spray Buffer Zones .....</b>	<b>10.7</b>
<b>SPECIFIC USE DIRECTIONS .....</b>	<b>11.0</b>
<b>Structural and Perimeter Pest Control.....</b>	<b>11.1</b>
<b>Animal Housing (such as poultry and livestock housing).....</b>	<b>11.2</b>
<b>MINOR USES .....</b>	<b>12.0</b>
<b>Ants on Turf.....</b>	<b>12.1</b>
<b>Outdoor Ornamentals .....</b>	<b>12.2</b>
<b>RESISTANCE MANAGEMENT RECOMMENDATIONS .....</b>	<b>13.0</b>

## 1.0 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.

## 2.0 FIRST AID

**IN CASE OF POISONING**, contact a physician or a poison control centre **IMMEDIATELY**. 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. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person.

**If on skin or clothing**, take off contaminated clothing. Rinse skin **IMMEDIATELY** with plenty of water for 15 – 20 minutes. Call a poison control centre or doctor for treatment advice.

**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 5 minutes, then continue rinsing eye. 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.

## 3.0 TOXICOLOGICAL INFORMATION

Contains petroleum distillates. Vomiting may cause aspiration pneumonia. Treat symptomatically.

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

## 4.0 PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN AND ANIMALS.

May irritate eyes. DEMAND® CS Insecticide is a potential skin sensitizer. In case of exposure to skin or face or other sensitive areas, some individuals may feel a tingling or numbness. This is a transitory effect and does not cause harm to skin. Avoid splashing in eyes or on skin, particularly the face. If hands are contaminated, wash with soap and water before touching other areas of skin.

### **For Interior and Exterior Structural and Exterior Perimeter (Barrier) Pest Control Uses**

When making an application to vinyl or wooden surfaces, treat a small area and allow to dry. Some types of vinyl or wooden surfaces, particularly if aged, may show some staining after application of DEMAND CS Insecticide.

**DO NOT** apply as a space spray.

**DO NOT** apply as a broadcast, perimeter or spot treatment to indoor residential structures. A residential structure is one where the general public, including children, could be exposed during or after application. Residential structures include, but are not limited to, homes, garages, schools, restaurants, hotels/motels, public buildings or any other structures where the general public, including children may potentially be exposed.

**DO NOT** apply to overhead areas or in confined spaces without appropriate respiratory and eye protection.

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

**DO NOT** allow spray to drip or allow drift onto non-target surfaces.

Care should be taken to avoid the pesticide exiting the void. Any residue deposits on non-target surfaces must be removed by the applicator.

**DO NOT** apply this product in any room being used as living, eating, sleeping or recovery area by patients, the elderly, or infirm when they are in the room.

**DO NOT** apply to soft surfaces of furniture, mattresses, linens, pet bedding, toys or clothing.

For hard surface furniture, treatments to dressers or other areas (for example, closets) listed on the labels where clothes, toys, towels and other items are stored, apply only to junction points and cracks and crevices. Broadcast, perimeter or spot treatments are not permitted. Remove all objects before treatment. Any residues deposited on non-target surfaces must be removed by the applicator. Treated areas must be dry before replacing stored items.

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

**DO NOT** allow people or pets or livestock to enter treated areas until sprays have dried.

**DO NOT** apply this product to edible growing crops or stored raw agricultural commodities used for food or feed.

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

**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 them following treatment.

#### **For Turf and Outdoor Ornamental Uses**

Do not use in residential areas. Residential areas are defined as any use site where bystanders including children could be exposed during or after application. This includes homes, schools, public buildings, or any other area where the general public including children could be

exposed.

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.

**Restricted Entry Intervals: DO NOT** enter or allow worker entry into treated areas during the intervals specified in the following table:

<b>Crop(s)</b>	<b>Post-application Activity</b>	<b>REI</b>
Turf (Golf Courses)	All activities	Until sprays have dried
Turf (Sod Farms) Outdoor Ornamentals	All activities	12 hours

## 5.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

### For Interior and Exterior Structural and Exterior Perimeter (Barrier) Pest Control Uses

When applying this product workers should wear long pants, long-sleeved shirts, and chemical resistant boots and gloves. In addition, during mixing, loading, clean-up and repair activities, workers must also wear chemical resistant gloves and safety goggles or a face shield. Avoid touching face with contaminated gloves or clothing. Wash gloves before removal.

For applications using mechanically-pressurized or power operated hand-held equipment, also wear chemical-resistant coveralls and a respirator with a NIOSH-approved organic-vapour-removing cartridge with a prefilter approved for pesticides OR a NIOSH-approved canister approved for pesticides during mixing, loading and application. DO NOT handle more than 7.2 L per day. This restriction is required to minimize exposure to the worker. Applications may be required over multiple days or using multiple applicators.

### For Turf and Outdoor Ornamental Uses

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. Gloves are not required during application within a closed cab.

For outdoor ornamentals, when handling more than 1.1 L per person per day using mechanically-pressurized handheld equipment, also wear a respirator with a NIOSH-approved organic-vapour-removing cartridge with a prefilter approved for pesticides OR a NIOSH-approved canister approved for pesticides during mixing, loading and application.

For application to outdoor ornamentals using handheld airblast/mistblower equipment, wear chemical-resistant coveralls with a chemical-resistant hood over long-sleeved shirt, long pants, chemical-resistant gloves, socks, chemical-resistant footwear and a respirator with a NIOSH-approved organic-vapour-removing cartridge with a prefilter approved for pesticides OR a NIOSH-approved canister approved for pesticides. DO NOT handle more than 51 mL per person per day. This restriction is required to minimize exposure to the worker. Applications may be required over multiple days or using multiple applicators.

## **For All Uses**

Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Wash splashes from skin IMMEDIATELY with plenty of water. Remove PPE immediately after handling this product. Wash the outside of gloves with soap and water before removing. As soon as possible, wash thoroughly and change into clean clothing. After spraying, wash hands and shower thoroughly with soap and water.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Wear freshly laundered clothes daily.

## **6.0 ENVIRONMENTAL PRECAUTIONS**

### **For Exterior Perimeter (Barrier) Uses**

Toxic to aquatic organisms.

**DO NOT** allow applications to contact water inhabited by fish, such as in aquariums and ornamental fish ponds that are located around structures being treated.

Toxic to bees. Avoid application around blooming plants.

### **For Turf and Outdoor Ornamental Uses**

Toxic to aquatic organisms. Observe 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 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. Avoid applications when bees are foraging in the treatment area in ground cover containing blooming weeds. 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.healthcanada.gc.ca/pollinators](http://www.healthcanada.gc.ca/pollinators)).

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.

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.

To reduce risk to aquatic organisms from runoff, a vegetative filter strip of at least 10 metres wide between the field edge and adjacent, downhill aquatic habitats must be observed, as

specified under DIRECTIONS FOR USE

This product contains an active ingredient and aromatic petroleum distillates, which are toxic to aquatic organisms.

## 7.0 STORAGE

Keep unused product in original container tightly closed, locked up and away from food.

Store in a cool, well ventilated area away from food or feed and out of the reach of children and animals. Store above 0°C. Shake well before use.

## 8.0 DISPOSAL

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

### Recyclable Containers

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

***IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING,  
CALL 1-800-327-8633 (FASTMED)***

## 9.0 PRODUCT INFORMATION

DEMAND CS Insecticide is a photostable, synthetic pyrethroid insecticide. It is a fast acting stomach and contact insecticide effective against a broad spectrum of pests. It has no fumigant or systemic activity. Best results will be obtained with DEMAND CS Insecticide when applied against the early development stages of the pest as determined by regular monitoring.

### 9.1 Structural and Perimeter (Barrier) Pest Control

#### 9.1.1 Interior Uses

**ONLY for use as a crack and crevice treatment** in residential, industrial and commercial buildings/structures, and on modes of transport. Permitted areas of use include, but are not limited

to, residential and industrial/commercial buildings, homes, apartments, hospitals, daycares, schools, nursing homes, hotels, motels, laboratories, buses, greenhouses (non-commercial), stores, warehouses, vessels, railcars, trucks, trailers, aircraft (cargo and other non-cabin areas only), restaurants, pet kennels, food granaries, food grain mills, and food manufacturing, processing and servicing establishments.

**DO NOT** apply as a broadcast, perimeter or spot treatment. No exposed surfaces should be treated.

Indoor application of the product should be performed when commercial facilities are NOT in operation.

**Crack and crevices use restrictions:** Use in food services areas of schools, daycares, hospitals, etc., is permitted only during closed down periods.

**For indoor applications:** If pest problem persists or reoccurs, treatment must only be repeated after 21 days. Maximum of 4 applications per year.

**Application within food handling establishments:** (places other than private residences in which exposed food is held, processed, prepared, or served) including, but not limited to, areas for receiving, storage, packing (canning, bottling, wrapping, boxing), preparing foods, edible waste storage and enclosed processing systems (mills, dairies, edible oils, syrups) and serving areas. Use as a crack and crevice treatment in and around both food and non-food areas. Apply in small amounts directly into cracks and crevices, using equipment capable of delivering a pin-stream spray, in points between different elements of construction, between equipment and floor, openings leading to voids and hollow spaces in walls, equipment and bases. Food contact surfaces and equipment should be cleaned with an effective cleaning compound and rinsed with potable water before using.

Take extreme care that the product is not introduced into the air. Avoid contamination of food and food processing surfaces.

**Application within food serving areas:** (facilities where foods are served, such as dining rooms): Apply as a crack and crevice treatment. Avoid treating areas likely to be contacted by food. **DO NOT** apply when facility is in operation or foods are exposed. Food must be covered or removed in area being treated. **DO NOT** apply directly to food or allow applications to contaminate food.

**Any treated surface that may contact food products should be washed and rinsed thoroughly with potable water before use.**

Use of application equipment such as the Actisol applicator in food areas should be limited to crack and crevice treatment only.

### 9.1.2 Exterior Uses

**For use as an exterior perimeter (barrier) treatment** around buildings and structures such as houses, apartment buildings, laboratories, greenhouses (non-commercial), stores, warehouses, schools, nursing homes, hospitals, restaurants, hotels, livestock/poultry housing, pet kennels, food granaries, food grain mills, and food manufacturing, processing and servicing establishments.

**For exterior applications:** if pest problem persists or reoccurs, treatment must only be repeated after 21 days. Maximum of 4 applications per year.

**Perimeter (Barrier) Treatment:** For control of ants, boxelder bugs, crickets, earwigs, millipedes, mosquitoes, sowbugs and spiders apply a continual band of insecticide solution around a building foundation and around windows, doors, service line entrances, eaves, vents and other areas with potential for entry by crawling pests. To facilitate application, remove debris and leaf litter from next to the foundation, cut back vegetation and branches that touch the foundation, and move or rake back rocks, deep mulch, or other potential pest harborage next to the foundation. Apply the band up to 1.0 m wide around the structure and upwards along the foundation to 1.0 m and around windows, doors, and roof overhangs. Apply as a coarse spray to thoroughly and uniformly wet the foundation and/or band area so that the insecticide will reach the soil or thatch level where pests may be active.

**NOTE: DO NOT** use water base sprays of DEMAND CS Insecticide in conduits, motor housings, junction boxes, switch boxes, or other electrical equipment because of possible shock hazard. For best results, thoroughly wash out sprayer and screen with water and detergent before using DEMAND CS Insecticide. DEMAND CS Insecticide has not stained or caused damage to painted or varnished surfaces, plastics, fabrics or other surfaces where water applied alone causes no damage.

## 10.0 DIRECTIONS FOR USE

### 10.1 General Information

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.

### 10.2 For Turf and Ornamental Uses

A Vegetative Filter Strip (VFS) of at least 10 metres wide must be constructed and maintained. The VFS is required between the field edge and adjacent, downhill aquatic habitats to reduce risk to aquatic organisms from run-off. Aquatic habitats include, but are not limited to, lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, and estuaries.

The VFS is to be composed of grasses and may also include shrubs, trees, or other vegetation. Additional guidance can be found on the PMRA Environmental Risk Mitigation webpages.

Both VFS and spray drift buffer zones must be observed

DO NOT APPLY BY AIR



### 10.3 Ground Application

**Field sprayer application: DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply when wind speed is greater than 8 km/h at the site of application. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural and Biological Engineers (ASABE S572.1) medium classification. Air-induction nozzles must be used for the ground application of this product. Boom height must be 60 cm or less above the crop or ground.

### 10.4 Airblast Application

**Airblast application: DO NOT** apply during periods of dead calm. 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.

### 10.5 Mixing Instructions

DEMAND CS Insecticide is intended for dilution with water for application using hand held or power operated application equipment as a coarse spray for crack and crevice treatments. Application equipment that delivers low volume treatments, such as the Actisol applicator, may also be used to make crack and crevice treatments. Fill applicator tank with the desired volume of water and add DEMAND CS Insecticide. Close and shake before use in order to ensure proper mixing. Shake or re-agitate applicator tank before use if application is interrupted. Mix only amount of treatment volume as required.

### 10.6 How to Apply

<b>Outdoor Perimeter</b>	Outdoor perimeter application is 1 m or less out from the building's foundation and to a maximum height of 1 m starting where the foundation meets the ground.
<b>Outdoor Spot</b>	Apply to small areas of exterior surfaces of structures.
<b>Crack and Crevice (indoor or outdoor)</b>	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.
<b>Furniture treatment including but not limited to hard surface furniture such as dressers, cupboards etc.</b>	Crack and crevice: Crack and crevice applications are to junction points on items.

### 10.7 Spray Buffer Zones

A spray buffer zone is NOT required for:

- Uses with hand-held application equipment permitted on this label

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

Method of application	Crop		Spray Buffer Zones (metres) Required for the Protection of:			
			Freshwater Habitats of Depths:		Estuarine/Marine Habitats of Depths:	
			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m
Field sprayer	Turf (sod, golf course, home, industrial and commercial lawns)		40	20	10	3
	Outdoor Ornamentals		25	10	5	3
Airblast	Outdoor Ornamentals	Early Growth Stage	80	70	60	50
		Late Growth Stage	70	60	50	40

For tank mixes, 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 Pest Management Regulatory Agency web site. Spray buffer zones for field sprayer application CANNOT be modified using the Spray Buffer Zone Calculator.

## 11.0 DIRECTIONS FOR USE

### 11.1 Structural and Perimeter (Barrier) Pest Control

<b>PESTS</b>	<b>Ants</b>
<b>CONCENTRATION OF ACTIVE INGREDIENT</b>	0.03%
<b>DILUTION RATE (mL of DEMAND CS/litre of water)</b>	0.03% = 3.0 mL per litre water To obtain a concentration of active ingredient of 0.03%, mix 3.0 mL of DEMAND CS Insecticide per litre of water
<b>COMMENTS</b>	<p><b><u>Interior applications:</u></b> Crack and crevice application only. <b>DO NOT</b> apply as a perimeter or spot treatment. No exposed surfaces should be treated.</p> <p>Apply to cracks and crevices around doors and windows and other places where ants may be found. For best results, locate and treat nests within structures. Where ants are trailing inside, apply as a crack and crevice treatment to active areas such as baseboards, corners, around pipes, in and behind cabinets, behind and under refrigerators, sinks, furnaces and stoves. When combining baits and crack and crevice insecticides, apply insecticides in cracks and crevices along baseboards and infested surfaces. Use baits in other areas that are untreated by residual insecticides.</p> <p><b><u>Exterior applications:</u></b> Apply as a perimeter (barrier) treatment around outdoor surfaces of doors and windows where ants may be found or where they may enter premises. For a description of the perimeter (barrier) treatment see the section "Exterior Uses" (Section 9.1.2) or the "How to Apply" table (Section 10.6) that precedes this table.</p>
<b>PESTS</b>	<b>Lesser Grain Borer, Rice weevils</b>
<b>CONCENTRATION OF ACTIVE INGREDIENT</b>	0.03%
<b>DILUTION RATE (mL of DEMAND CS/litre of water)</b>	0.03% = 3.0 mL per litre water To obtain a concentration of active ingredient of 0.03%, mix 3.0 mL of DEMAND CS Insecticide per litre of water
<b>COMMENTS</b>	<p><b><u>Interior applications:</u></b> Crack and crevice application only. <b>DO NOT</b> apply as a perimeter or spot treatment. No exposed surfaces should be treated.</p> <p>Apply as a crack and crevice treatment to cupboards, shelving, and storage areas. Remove all utensils, uncovered foodstuffs (or any having original package opened), and shelf paper before making application.</p> <p>Cover shelves with clean paper before replacing any utensils, foodstuff, or other items.</p> <p>Any foodstuff accidentally contaminated with treatment solution should be destroyed.</p>

<b>PESTS</b>	<b>Boxelder bugs, Centipedes, Millipedes, Sowbugs</b>
<b>CONCENTRATION OF ACTIVE INGREDIENT</b>	0.03%
<b>DILUTION RATE (mL of DEMAND CS/litre of water)</b>	0.03% = 3.0 mL per litre water  To obtain a concentration of active ingredient of 0.03%, mix 3.0 mL of DEMAND CS Insecticide per litre of water
<b>COMMENTS</b>	<b><u>Interior applications:</u></b> Crack and crevice application only. <b>DO NOT</b> apply as a perimeter or spot treatment. No exposed surfaces should be treated.  Apply as a crack and crevice treatment indoors to baseboards, storage areas, and other locations.  <b><u>Exterior applications:</u></b> Apply as a perimeter (barrier) treatment around outdoor surfaces of doors and windows where boxelder bugs, millipedes and sowbugs may be found or where they may enter premises. For a description of the perimeter (barrier) treatment see the section "Exterior Uses" (Section 9.1.2) or the "How to Apply" table (Section 10.6) that precedes this table.
<b>PESTS</b>	<b>Cluster Flies</b>
<b>CONCENTRATION OF ACTIVE INGREDIENT</b>	0.03%
<b>DILUTION RATE (mL of DEMAND CS/litre of water)</b>	0.03% = 3.0 mL per litre water  To obtain a concentration of active ingredient of 0.03%, mix 3.0 mL of DEMAND CS Insecticide per litre of water
<b>COMMENTS</b>	<b><u>Exterior applications:</u></b> To control cluster flies apply in late summer or early fall before cluster flies are observed alighting on surfaces. Apply as a coarse spray, to run-off, on siding, under eaves, and around windows and doors, paying particular attention to south-facing surfaces.  <b><u>Interior applications:</u></b> Crack and crevice application only. <b>DO NOT</b> apply as a perimeter or spot  In winter and spring when cluster flies become active and are emerging, interior crack-and-crevice treatment can help reduce the infestation.

<b>PESTS</b>	<b>German Cockroaches, Crickets, Earwigs, Firebrats, Silverfish, Spiders</b>
<b>CONCENTRATION OF ACTIVE INGREDIENT</b>	0.03%
<b>DILUTION RATE (mL of DEMAND CS/litre of water)</b>	0.03% = 3.0 mL per litre water  To obtain a concentration of active ingredient of 0.03%, mix 3.0 mL of DEMAND CS Insecticide per litre of water
<b>COMMENTS</b>	<b><u>Interior applications:</u></b> Crack and crevice application only. <b>DO NOT</b> apply as a perimeter or spot  Apply to cracks and crevices where these pests hide, such as baseboards, corners, storage areas, closets, around water pipes, doors and windows, attics and eaves, cabinets, behind and under refrigerators, sinks, furnaces, and stoves, the underside of shelves, drawers and similar areas.  <b><u>Exterior applications:</u></b> Apply as a perimeter (barrier) treatment around outdoor surfaces of doors and windows where crickets, earwigs and spiders may be found or where they may enter premises. For a description of the perimeter (barrier) treatment see the section "Exterior Uses" (Section 9.1.2) or the "How to Apply" table (Section 10.6) that precedes this table.
<b>PESTS</b>	<b>Mosquitoes</b>
<b>CONCENTRATION OF ACTIVE INGREDIENT</b>	0.03%
<b>DILUTION RATE (mL of DEMAND CS/litre of water)</b>	0.03% = 3.0 mL per litre water  To obtain a concentration of active ingredient of 0.03%, mix 3.0 mL of DEMAND CS Insecticide per litre of water
<b>COMMENTS</b>	<b><u>Exterior applications:</u></b> Apply as an outdoor structural perimeter (barrier) treatment. For a description of the perimeter (barrier) treatment see the section "Exterior Uses" (Section 9.1.2) or the "How to Apply" table (Section 10.6) that precedes this table.

<b>PESTS</b>	<b>Bed Bugs</b>
<b>CONCENTRATION OF ACTIVE INGREDIENT</b>	0.03%
<b>DILUTION RATE (mL of DEMAND CS/litre of water)</b>	0.03% = 3.0 mL per litre water To obtain a concentration of active ingredient of 0.03%, mix 3.0 mL of DEMAND CS Insecticide per litre of water
<b>COMMENTS</b>	<p><b>DO NOT apply to soft furniture surfaces or mattresses where people will be laying or sitting.</b></p> <p><b>DO NOT apply as a broadcast, perimeter or spot treatment.</b></p> <p><b>ONLY FOR CRACK AND CREVICE TREATMENT. No exposed surfaces should be treated.</b></p> <p>Treat crack and crevices in baseboards, loose plaster, behind bed frames and headboards, and beneath beds and furniture. See the "How to Apply" table (Section 10.6) that precedes this table for a description of these application types.</p> <p>Infested bedding should not be treated, but should be removed, placed in sealed plastic bags, and taken for laundering and drying at high temperatures.</p>
<p><b><u>Indoor crack and crevice:</u></b> For hard surface furniture, treatments to bed frames, headboards, dressers or other areas (for example, closets) listed on the labels where clothes, toys, towels and other items are stored, apply only to junction points and cracks and crevices. Broadcast, perimeter or spot treatments are not permitted. Remove all objects before treatment. Any residues deposited on non-target surfaces must be removed by the applicator. Treated areas must be dry before replacing stored items.</p> <p>For effective control of bed bugs, contact is required with the product. However this product is only for use in indoor crack and crevice. Treatment must only be repeated after 21 days if pest problem persists or reoccurs. Maximum of 4 applications per year.</p>	

## 11.2 Animal Housing (such as poultry and livestock housing)

For indoor applications to residential areas (where the general public, including children may be exposed), **DO NOT** apply as a broadcast, perimeter or spot treatment.

<b>PESTS</b>	<b>Cluster flies in animal housing</b> (such as poultry and livestock housing).
<b>DOSAGE</b>	3.0 mL of DEMAND CS Insecticide per litre of water, equivalent to a concentration of active ingredient in water of 0.03%  Apply as a coarse spray, to run-off.
<b>COMMENTS</b>	<b>Exterior applications:</b> Apply in late summer or early fall before cluster flies are observed alighting on surfaces. Apply as a coarse spray, to run-off, on siding, under eaves, and around windows and doors, paying particular attention to south-facing surfaces.  <b>Interior Applications:</b> In winter and spring when cluster flies become active and are emerging, interior crack-and- crevice treatment can help reduce the infestation., along with general surface application in infested attics or unoccupied lofts.  If pest problem persists or reoccurs, treatment must only be repeated after 21 days. Maximum of 4 applications per year.
<b>PESTS</b>	<b>House flies in animal housing</b> (such as poultry and livestock housing).
<b>DOSAGE</b>	3.0 mL of DEMAND CS Insecticide per litre of water, equivalent to a concentration of active ingredient in water of 0.03%  Apply as a coarse spray, to run-off.
<b>COMMENTS</b>	When infestation occurs, apply as a coarse spray, to run-off, to horizontal surfaces and overhead areas and allow to dry before reintroduction of animals.  If pest problem persists or reoccurs, treatment must only be repeated after 21 days. Maximum of 4 applications per year.
<b>PESTS</b>	<b>Suppression of Litter beetles</b> (Darkling, Hide, and Carrion Beetles)
<b>DOSAGE</b>	3.0 mL of DEMAND CS Insecticide per litre of water, equivalent to a concentration of active ingredient in water of 0.03%  Apply as a coarse spray, to run-off.
<b>COMMENTS</b>	To suppress adult litter beetles, apply DEMAND CS Insecticide to walls and floors at cleanout, before reintroduction of animals. Allow spray to dry before reintroduction of animals. This will suppress beetles that escaped earlier treatment and will help delay onset of future infestations. Pay attention to areas where beetles frequently occur, such as walls, supports, cages, stalls, and around feeders.

## 12.0 MINOR USES

### NOTE TO USER:

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than Syngenta Canada Inc. under the User Requested Minor Use Label Expansion program. For these uses, Syngenta Canada Inc. 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.

### 12.1 Ants on Turf

Pest(s)	Ants
Site (Crop)	Turf (sod, golf course, home, industrial and commercial lawns)
Method of Application	Ground application only. Apply DEMAND CS as a broadcast foliar application to turf. Do not apply when turf is waterlogged or when soils are saturated with water.
Rate of Application and Spray Volume	3.7 mL product/100 m <sup>2</sup> (37 g ai/ha) and spray volume of 800-1000 L/ha. Delay irrigation or mowing for 2 days after application.
Number of Applications	Maximum of 4 applications per year. Applications should be made in spring and late summer.
Application Interval	Reapply after a minimum of 14 days if monitoring indicates further applications are required.
Application Timing	Apply prior to the establishment of high insect pest populations and significant turf damage.  Applications should be made in spring and late summer.
OTHER	DO NOT APPLY BY AIR

### 12.2 Outdoor Ornamentals

Pest(s)	Black vine weevil adults ( <i>Otiorhynchus sulcatus</i> )
Site (Crop)	Outdoor ornamentals
Rate of Application and Spray Volume	36 mL/100 L of water (3.6 g ai/100 L of water). Apply in sufficient volume to ensure thorough coverage, to a maximum volume of 750L/ha.
Number of Applications	Maximum of 3 applications per crop cycle.
Application Interval	Reapply after a minimum of 7 days if monitoring indicates further applications are required.
Application Timing	Applications are to be made as soon as adult weevils appear.
OTHER	<b>DO NOT</b> APPLY BY AIR  <b>DO NOT</b> apply in greenhouses.  Maximum spray volume of 750 L/ha.



### **13.0 RESISTANCE-MANAGEMENT RECOMMENDATIONS**

For resistance management, please note that DEMAND CS Insecticide contains a Group 3 insecticide. Any insect population may contain individuals naturally resistant to DEMAND CS Insecticide and other Group 3 insecticides. The resistant individuals may dominate the insect population if this group of insecticide is used repeatedly in the same fields. 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 DEMAND CS Insecticide or other Group 3 insecticides with different groups that control the same pests in a field.

Use tank mixtures with insecticides from a different group when such use is permitted.

Insecticide use should be based on an IPM program that includes scouting, record keeping, and considers cultural, biological and other chemical control practices.

Monitor treated pest populations for resistance development.

Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.

For further information and to report suspected resistance, contact Syngenta Canada Inc. company representatives at 1-877-SYNGENTA (1-877-964-3682) or at [www.syngenta.ca](http://www.syngenta.ca).

DEMAND® is a trademark of a Syngenta Group Company.