2022-6459
2024-08-02

Group	1B	INSECTICIDE

[Container Label]
DIMETHOATE

CYGON® 400EC

INSECTICIDE - AGRICULTURAL

Emulsifiable Concentrate - Contains Dimethoate

A Systemic Insecticide for the Control of Insects and Mite on Listed Vegetable, Fruit and Field Crops and on Outdoor Flowering Plants, Ornamental Shrubs and Trees

ACTIVE INGREDIENT: dimethoate ..... 400 g/L

REGISTRATION NUMBER 35268

PEST CONTROL PRODUCTS ACT

KEEP OUT OF REACH OF CHILDREN

READ THE LABEL AND ACCOMPANYING BROCHURE (or LEAFLET) BEFORE USING.

DANGER  **POISON**

IRRITATING TO EYES AND SKIN
POTENTIAL SKIN SENSITIZER

SHIP and STORE BETWEEN 4˚C and 30˚C

EMERGENCY TELEPHONE NUMBER
In case of medical emergency involving this product, call toll free, day or night, 1-800-331-3148.

FMC of Canada Limited
6755 Mississauga Road, Suite 204
Mississauga, ON L5N 7Y2
1-833-362-7722

®Registered trademark of Cheminova A/S

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THIS PRODUCT IS NOT TO BE USED AROUND HOMES OR OTHER RESIDENTIAL AREAS SUCH AS PARKS, SCHOOL GROUNDS, AND/OR PLAYING FIELDS. IT IS NOT FOR USE BY HOMEOWNERS OR OTHER UNCERTIFIED USERS.

NOTICE TO USER

This control product is to be used only in accordance with the directions on this 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.

FIRST AID

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

CALL A PHYSICIAN OR POISON CONTROL CENTRE IMMEDIATELY IN ALL CASES OF SUSPECTED POISONING.

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 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 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

This product contains petroleum distillates. Vomiting may cause aspiration pneumonia. Treat symptomatically.

Dimethoate is an organophosphate that is a cholinesterase inhibitor. Typical symptoms of overexposure to cholinesterase inhibitors include headache, nausea, dizziness, sweating, salivation, and runny nose and eyes. This may progress to muscle twitching, weakness, tremor, incoordination, vomiting, abdominal cramps and diarrhea in more serious poisonings. A life-threatening poisoning is signified by loss of consciousness, incontinence, convulsions and respiratory depression with a secondary cardiovascular component. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate degree of exposure (baseline data are useful). Atropine, only by injection, is the preferable antidote.

Oximes, such as pralidoxime chloride, may be therapeutic if used early; however, use only in conjunction with atropine. In cases of severe acute poisoning, use antidotes immediately after establishing an open airway and respiration. With oral exposure, the decision of whether to induce vomiting or not should be made by an attending physician. This product contains petroleum distillates. Vomiting may cause aspiration pneumonia.

PRECAUTIONS

Human Health Precautions

KEEP OUT OF REACH OF CHILDREN

May be harmful or fatal if swallowed, inhaled or absorbed through skin.
Concentrate material may cause eye irritation.
Avoid breathing vapours or spray mist.
Use only in well ventilated areas.
Avoid contact with skin, eyes or clothing.
Wash thoroughly after using and before eating, drinking or smoking.
Keep the following personal protective equipment immediately available for use in case of emergency (for example, a broken package, spill, or equipment breakdown): chemical-resistant coveralls, chemical-resistant gloves, chemical-resistant head gear and a respirator.
DO NOT apply in greenhouses.
DO NOT contaminate foods or feeds.

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 the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with the closed system is permitted.
It is desirable that the pilot have communication capabilities at each treatment site at the time of application.
All personnel on the job site must wash hands and face thoroughly before eating and drinking.
Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

Personal Protective Equipment (PPE) And Engineering Controls

Mixing/loading liquids: clean-up and repair (for all uses except forestry):

Wear chemical-resistant coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks, chemical-resistant footwear, protective eyewear (goggles or face shield) and suitable respiratory protection. Suitable respiratory protection is defined as a respirator with a NIOSH-approved organic-vapour removing cartridge (with a prefilter) approved for pesticides or a NIOSH-approved canister approved for pesticides.

Mixing/loading, clean-up and repair (forestry: hemlock and spruce):

Closed mixing/loading systems are required. A closed system means removing a pesticide from its original container, rinsing, mixing, diluting, and transferring the pesticide through connecting hoses and couplings that prevent exposure to the pesticide. Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks, chemical-resistant footwear, and protective eyewear (goggles or face shield).

Mixing/loading, clean-up and repair (forestry: Douglas fir (seed tree), Sitka spruce (seed tree), spruce (seed tree and woodland)):

Wear chemical-resistant coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks, chemical-resistant footwear, protective eyewear (goggles or face shield) and suitable respiratory

protection. Suitable respiratory protection is defined as a respirator with a NIOSH-approved organic-vapour-removing cartridge (with a prefilter) approved for pesticides or a NIOSH-approved canister approved for pesticides.

Applying by air:
Wear coveralls over a long-sleeved shirt, long pants, socks and chemical-resistant footwear.

Applying by groundboom and/or airblast:
Use a closed cab that provides both a physical barrier and respiratory protection (for example, dust/mist filtering and/or vapour/gas purification system). The closed cab must have a chemical-resistant barrier that totally surrounds the occupant and prevents contact with pesticides outside the cab. Wear coveralls over a long-sleeved shirt, long pants, socks and chemical-resistant footwear.

Applying by handheld equipment:
Wear chemical-resistant coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks, chemical-resistant footwear and suitable respiratory protection. Suitable respiratory protection is defined as a respirator with a NIOSH-approved organic-vapour-removing cartridge (with a prefilter) approved for pesticides or a NIOSH- approved canister approved for pesticides. Wear eye and head protection when applying above waist height, including overhead. Limit the amount of active ingredient handled per day to 2.8 kg per person (for example, approximately 2950 L at a rate of 0.96 g a.i./L).

Applying by right-of-way sprayer:
Wear chemical-resistant coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks, chemical-resistant footwear, protective eyewear (goggles or face shield) and suitable respiratory protection. Suitable respiratory protection is defined as a respirator with a NIOSH-approved organic-vapour-removing cartridge (with a prefilter) approved for pesticides OR a NIOSH-approved canister approved for pesticides. Wear head protection when applying above waist height, including overhead.

Applying by soil drench, soil injection or chemigation:
Wear chemical-resistant coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks, chemical-resistant footwear and suitable respiratory protection. Suitable respiratory protection is defined as a respirator with a NIOSH-approved organic-vapour-removing cartridge (with a prefilter) approved for pesticides or a NIOSH-approved canister approved for pesticides.

Product Specific Precautions:
Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-833-362-7722 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

ENVIRONMENTAL PRECAUTIONS

Toxic to birds, small wild mammals and aquatic organisms. Observe spray buffer zones specified under Directions for Use.

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

Toxic to bees. Bees may be exposed through direct spray, spray drift, and residues on/in leaves, pollen and nectar in flowering crops and weeds. 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 groundcover 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). Follow crop specific directions for application timing.

For applications on crops that are highly attractive to pollinators (alfalfa, clovers, canola, safflower, blueberries, cherries, peaches, pears, asparagus, and outdoor ornamentals excluding coniferous evergreens), or when using managed bees for pollination services:

Do not apply during the crop blooming period or during the 5-day period before the crop blooms.

For applications on all other crops:

Avoid application during the crop blooming period. If applications must be made during the crop blooming period, restrict applications to evening when most bees are not foraging.

Toxic to certain beneficial insects. Minimize spray drift to reduce harmful effects on beneficial insects 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.

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.
FOR RATES AND TIMES OF APPLICATION SEE THE ADDITIONAL INFORMATION IN THIS PAMPHLET

STORAGE

STORAGE PRECAUTIONS:
Store this product away from food or feed. Do not use, pour, spill or store near heat or open flame.
Keep out of direct sunlight.
Ship and store between 4°C and 30°C.

DECONTAMINATION:
If accidental spillage of CYGON 400EC INSECTICIDE should occur, scrub contaminated area immediately with a strong laundry soap solution or use household lye. Detergents are not satisfactory for this purpose. Repeated scrubbings are necessary on plain wood surfaces.

DISPOSAL

Re-fillable containers:
For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

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.
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Emulsifiable Concentrate - Contains Dimethoate

WARNING (Skull & Crossbones) POISON

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PRECAUTIONS

Human Health Precautions

KEEP OUT OF REACH OF CHILDREN

Fatal if swallowed.
May irritate eyes and skin. Potential skin sensitizer.
Avoid breathing vapours or spray mist.
Use only in well ventilated areas.
Avoid contact with skin, eyes or clothing.
Wash thoroughly after using and before eating, drinking or smoking.
Keep the following personal protective equipment immediately available for use in case of emergency (for example, a broken package, spill, or equipment breakdown): chemical-resistant coveralls, chemical-resistant gloves, chemical-resistant head gear and a respirator.
DO NOT apply in greenhouses.
DO NOT contaminate foods or feeds.

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 the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with the closed system is permitted.
It is desirable that the pilot have communication capabilities at each treatment site at the time of application.
All personnel on the job site must wash hands and face thoroughly before eating and drinking.
Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

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Mixing/loading liquids: clean-up and repair (for all uses except forestry):

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Applying by air:
Wear coveralls over a long-sleeved shirt, long pants, socks and chemical-resistant footwear.

Applying by groundboom and/or airblast:
Use a closed cab that provides both a physical barrier and respiratory protection (for example, dust/mist filtering and/or vapour/gas purification system). The closed cab must have a chemical-resistant barrier that totally surrounds the occupant and prevents contact with pesticides outside the cab. Wear coveralls over a long-sleeved shirt, long pants, socks and chemical-resistant footwear.

Applying by handheld equipment:
Wear chemical-resistant coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks, chemical-resistant footwear and suitable respiratory protection. Suitable respiratory protection is defined as a respirator with a NIOSH-approved organic-vapour-removing cartridge (with a prefilter) approved for pesticides or a NIOSH- approved canister approved for pesticides. Wear eye and head protection when applying above waist height, including overhead. Limit the amount of active ingredient handled per day to 2.8 kg per person (for example, approximately 2950 L at a rate of 0.96 g a.i./L).

Applying by right-of-way sprayer:
Wear chemical-resistant coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks, chemical-resistant footwear, protective eyewear (goggles or face shield) and suitable respiratory protection. Suitable respiratory protection is defined as a respirator with a NIOSH-approved organic-vapour-removing cartridge (with a prefilter) approved for pesticides OR a NIOSH-approved canister approved for pesticides. Wear head protection when applying above waist height, including overhead.

Applying by soil drench, soil injection or chemigation:
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ENVIRONMENTAL PRECAUTIONS
Toxic to birds, small wild mammals and aquatic organisms. Observe spray buffer zones specified under Directions for Use.

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

Toxic to bees. Bees may be exposed through direct spray, spray drift, and residues on/in leaves, pollen and nectar in flowering crops and weeds. 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 groundcover 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). Follow crop specific directions for application timing.

For applications on crops that are highly attractive to pollinators (alfalfa, clovers, canola, safflower, blueberries, cherries, peaches, pears, asparagus, and outdoor ornamentals excluding coniferous evergreens), or when using managed bees for pollination services:

Do not apply during the crop blooming period or during the 5-day period before the crop blooms.

For applications on all other crops:

Avoid application during the crop blooming period. If applications must be made during the crop blooming period, restrict applications to evening when most bees are not foraging.

Toxic to certain beneficial insects. Minimize spray drift to reduce harmful effects on beneficial insects 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.

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.

STORAGE

STORAGE PRECAUTIONS:
Store this product away from food or feed. Do not use, pour, spill or store near heat or open flame.
Keep out of direct sunlight.
Ship and store between 4°C and 30°C.

DECONTAMINATION:
If accidental spillage of CYGON 400EC INSECTICIDE should occur, scrub contaminated area immediately

with a strong laundry soap solution or use household lye. Detergents are not satisfactory for this purpose. Repeated scrubbings are necessary on plain wood surfaces.

DISPOSAL

Re-fillable containers:
For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

Recyclable containers:
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GENERAL INFORMATION

THIS PRODUCT IS NOT TO BE USED AROUND HOMES OR OTHER RESIDENTIAL AREAS SUCH AS PARKS, SCHOOL GROUNDS, AND/OR PLAYING FIELDS. IT IS NOT FOR USE BY HOMEOWNERS OR OTHER UNCERTIFIED USERS.

DIRECTION FOR USE

Use Limitation

- 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.

- Toxic to bees. For applications on crops that are highly attractive to pollinators (alfalfa, clovers, canola, safflower, blueberries, cherries, peaches, pears, asparagus, and outdoor ornamentals excluding coniferous evergreens), or when using managed bees for pollination services, DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms. For all other crops, avoid application during the crop blooming period. If applications must be made during the crop blooming period, restrict applications to evening when most bees are not foraging.
- Not for use in greenhouses.
- Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.
- Do not apply directly to animals. Remove livestock and poultry from buildings when spraying.
- Do not contaminate food or feeds.
- Do not contaminate feed troughs, drinking fountains or litter.
- Do not use in milk processing rooms or dwellings.
- Do not mix with whitewash or apply within 2 weeks of whitewashing.

Spray Drift Management

FIELD SPRAYER APPLICATION: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) fine classification. Boom height must be 60 cm or less above the crop or ground.

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.

AERIAL 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 16 km/h at flying height at the site of application . **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) fine classification. Reduce drift caused by turbulent wingtip vortices. The nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotorspan.

FOR AERIAL APPLICATION: A minimum of 30 L/ha of spray solution per hectare is specified. Use a boom pressure of 235 kPa or less. Avoid placing nozzles where spray will enter wing tip vortices.

SPRAY BUFFER ZONES

A spray buffer zone is NOT required for:

- uses with hand-held application equipment permitted on this label,
- soil drench or soil incorporation.

The spray buffer zones specified in Table 1 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.

Table 1 Spray Buffer Zones

Method of Application	Crop		Spray Buffer Zones (metres) Required for the Protection of:			
			Freshwater habitat of Depth:		Estuarine/Marine habitats of Depth:	
			Less than 1m	Greater than 1m	Less than 1m	Greater than 1m
Field sprayer	Wheat, forage crops (grasses, hay, clover), clover (sweet, red, alsike), safflower		2	1	1	1
	Azaleas, camellias, gardenias, gerberas, gladioli, poinsettias, roses		1	1	1	1
	Canary grass (seed production), flax		1	0	1	0
	Strawberries		3	2	3	1
	Beans, eggplant, leafy vegetables (beet greens, turnip greens, kale, leaf lettuce, Swiss chard)		1	1	1	1
	Broccoli, cauliflower		2	1	2	1
	Brussels sprouts, Chinese broccoli, bok choi, chicory, peppers		2	1	1	1
	Peas (field or canning)		1	0	1	0
	Asparagus		3	1	2	1
	Potatoes, tomatoes		2	1	1	1
	Day lilies, Euonymus, irises		2	1	2	1
	Arbor vitae, juniper, lilac (*Syringa* spp.), oak, pine (Mugho, red, Scots), Taxus (yew), cedar		2	1	2	1
	Sitka spruce (seed tree)		15	5	10	5
	Birch		1	0	1	0
	Boxwood		1	1	1	1
	Douglas-fir (seed tree), spruce (seed tree and woodland),		10	5	10	5
	Larch		3	2	4	2
	Holly (English, American)		1	1	1	1
Airblast	Arbor vitae, cedar, juniper, oak, pine (Mugho, red, Scots), Taxus (yew)	Late growth stage	4	2	4	2
	Birch	Late growth stage	1	0	1	0
	Boxwood, Holly (English, American)	Late growth stage	2	1	2	1
	Douglas-fir (seed tree),	Late growth stage	25	15	20	15
	Larch	Late growth stage	5	3	10	4
	Lilac (*Syringa* spp.)	Late growth stage	3	1	3	1

	Spruce (seed tree and woodland)	Late growth stage	20	10	25	15
	Sitka spruce (seed tree)	Late growth stage	25	15	25	15
	Pears	Early growth stage	15	5	15	5
		Late growth stage	10	3	5	3
	Filberts, hazelnuts	Early growth stage	15	5	20	10
		Late growth stage	5	3	10	4
	Peaches	Early growth stage	20	10	15	5
		Late growth stage	10	4	10	4
	Cherries (sour, sweet)	Early growth stage	10	4	10	3
		Late growth stage	5	2	4	2
	Blueberry (lowbush and highbush)	Early growth stage	4	1	3	1
		Late growth stage	2	1	2	1
Aerial	Flax, canary grass (seed production), peas (field or canning)	Fixed wing	1	0	1	0
		Rotary wing	1	0	1	0
	Canola	Fixed wing	5	1	2	1
		Rotary wing	3	1	1	1
	Wheat, oats, barley, forage crops (grasses, hay, clover), clover, safflower	Fixed wing	10	1	5	1
		Rotary wing	5	1	5	1
	Alfalfa (forage and seed production), clover (sweet, red, alsike)	Fixed wing	10	1	5	1
		Rotary wing	5	1	3	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 (ASAE) category indicated on the labels for those tank mix partners.

The spray buffer zones for 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.

General Tank Mixing Instructions

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 FMC Canada Limited at 1-833-362-7722 for information before applying any tank mix that is not specifically recommended on this label

General Application Instructions

Vegetable, Field and Fruit Crops:

1. CYGON 400EC INSECTICIDE is a true systemic insecticide. A systemic insecticide is absorbed into the system of the plant upon application and, as with all systemic materials, may in specific plants cause reactions which are neither predictable nor common to all members of the species.
2. FOR PROPER TIMING of treatments for the control of specific pests on crops, consult local agricultural authorities. In general, apply adequate spray for good coverage when pests appear or when damage is first observed, unless otherwise indicated. Do not overdose or overspray.
3. Do not apply foliar sprays during the heat of the day or when temperatures are exceedingly high.

AERIAL APPLICATION DIRECTIONS FOR USE:

Use special care in aerial applications where damage from drift can be greater.

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Use Precautions:

Apply only when meteorological conditions at the treatment site allow for complete and even crop

coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *National Aerial Pesticide Application Manual, developed by the Federal/ Provincial/ Territorial Committee on Pest Management and Pesticides.*

Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Appropriate buffer zones should be established between treatment areas and aquatic systems and treatment areas and significant wildlife habitat. Do not contaminate water through spray drift or by cleaning of equipment or disposal of wastes.

Do not apply this product directly to, or otherwise permit it to come into direct contact with non-target crops or other non-target species and do not permit spray mists to drift onto them. Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that result in fine particles (mist). Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure. Apply only when there is little or no hazard from spray drift. Small quantities of the spray, which may not be visible, may contaminate and damage sensitive non-target habitat. A method must be used to detect air movement, lapse conditions, or temperature inversions (stable air) such as the use of balloons or a continuous smoke column at or near the spray site or a smoke generator on the spray equipment. If the smoke develops into layers or indicates a potential for hazardous spray drift, do not spray. Do not spray in winds exceeding 16 km/hour. Use low nozzle pressure (below 235 kPa). Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

Instructions for Specific Uses

CYGON 400EC INSECTICIDE CAN BE USED TO CONTROL:

- Aphids, mites and tarnished plant bugs on pears, peaches and strawberries
- Pear psylla on pears
- Fruit fly maggots on cherries
- Aphids and leafhoppers on beans, leafy vegetables, potatoes and tomatoes (field)
- Aphids on cole crops, peas and peppers
- Bean beetles, leaf miners, mites and tarnished plant bug on beans and tarnished plant bug on eggplant
- Aphids and grasshoppers on certain field crops

Uses added under URMULE will be identified by an "*" and will include the Minor Use Statement

Vegetable Crops

NOT FOR APPLICATION TO VEGETABLE CROPS BY AIR

Vegetable Crops*	Insects Controlled	RATE OF CYGON 400EC INSECTICIDE PER		Pre harvest Interval	Remarks
		10 L water	Hectare		
Asparagus	Asparagus aphid	42 mL	2.76 L	See Remarks	**For immature asparagus:** begin applications mid-May. Apply by boom or field sprayer using 675 L of water per hectare. For immature asparagus; **DO NOT** harvest for feed or food. **For mature asparagus**: applications can be made post-harvest only, until plant defoliation. Ground application only. Do not apply during the crop bloom period or during the 5-day period before the crop blooms. Max Number of Applications per Year – 2 Minimum Application Interval – 3-4 weeks Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.

Beans	Aphids, bean beetles, leafhoppers, leaf miners, lygus bugs, mites, tarnished plant bug	8.4 -12 mL	0.84 – 1.2 L	7 days	Do not feed or allow livestock to graze treated forage. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 14 Restricted Entry Interval (REI) – 12 hours
Cole Crops: Broccoli, Brussels sprouts, cauliflower	Aphids	8.4 - 12 mL	0.84 - 1.2 L	Brussels sprouts - 21 days Broccoli, cauliflower – 7 days	Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 7 Restricted Entry Interval (REI) – 5 days To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.
Chinese broccoli, bok choi, chicory	Aphids	-	0.72 - 1.2 L	7 days	Apply when aphids are present; ground application to foliage. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 7 Restricted Entry Interval (REI) – 4 days To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.
Eggplant	Tarnished plant bug	-	600 - 840 mL	7 days	Apply when bugs are found and flowering is seen. Treat again in 7 to 10 days if bugs are found. Consult local authorities for proper timing. Do not apply when bees are foraging. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 7 Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.

Leafy Vegetables: Beet greens, turnip greens, kale, lettuce**, Swiss chard	Aphids, leafhoppers	8.4 mL	840 mL	14 days	**Do not use on Head Lettuce. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 15 Restricted Entry Interval (REI) – 3 days To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.
Peppers	Aphids, pepper maggot	8.4 - 12 mL	0.84 – 1.2 L	3 days	Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 7 Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.
Potatoes Tomatoes (field)	Aphids, leafhoppers	6 - 10.8 mL	0.66- 1.2 L	7 days	Consult local agricultural authorities for proper timing. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 7 Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.

* NOTE: For each of the vegetable crops, apply CYGON 400EC INSECTICIDE in sufficient water for good coverage. Repeat applications as necessary, except that label directions concerning required interval before harvest must be observed.
* NOTE: For each of the vegetable crops: Apply at the recommended rate; do not exceed a maximum spray volume of 1000 L per hectare unless otherwise stated.

- TOXIC to bees. Avoid application during the crop blooming period. If applications must be made during the crop blooming period, restrict applications to evening when most bees are not foraging. When using managed bees for pollination services, DO NOT apply during the crop blooming period.

Field Crops

Field Crops	Insects Controlled	Rate of CYGON 400EC INSECTICIDE / HA	Pre harvest Interval	Remarks **

Alfalfa	Aphids, leafhoppers, reduction of alfalfa weevil larvae, lygus bugs	510 mL	10 days (Grazing or harvest)	Use a water volume of at least 200 L/ha with ground equipment. Do not graze or harvest for forage within 2 days after treatment. Do not graze or harvest for forage within 10 days after treatment OR When using a rate of 1020 mL or higher: Do not graze or harvest for forage within 28 days after treatment. Do not apply more than once per season. Ground or aerial application. Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
	Blotch leaf miners	660 mL		
	Grasshoppers – nymphs	660 mL		
	Grasshoppers - adults	1020 - 1080 mL	28 days (Grazing or harvest)	
Alfalfa (seed production)	Lygus bugs, plant bugs	1.32 L		
Soybeans	Spider mites	1.2 L	30 days	Do not feed or allow livestock to graze treated forage. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 7 Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.
Peas (field or canning)	Aphids	330 - 456 mL	3 days	May be applied by air or ground equipment. Do not feed or allow livestock to graze treated vines within 21 days after application. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 14 Restricted Entry Interval (REI) –

				12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.
Canary seed	Aphids	600 mL	21 days	Apply when more than 50 aphids per canary seed head between heading and the soft dough stage. Ground or aerial application. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 30 Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.
Canola	Aphids, leafhoppers, grasshoppers	1020 - 1080 mL	21 days	Repeat application only when necessary. Ground or aerial application. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 7 Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
	Lygus bugs	540 – 1080 mL		
Forage crops, grain	Lygus bugs, plant bugs	510 mL	2 days (Grazing or harvest)	Use a higher rate on grain. Ground or aerial application.

	Grasshoppers - low infestations	510 - 660 mL	2 days (Grazing or harvest)	Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 7 Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.
	Grasshoppers - nymphs	660 mL	2 days (Grazing or harvest)	
	Grasshopper - adults	1020 mL - 1200 mL	28 days (Grazing or harvest)	
Safflower	Grasshoppers (nymphs, adults)	660 mL – 1200 mL	21 days	Apply when damage is apparent and more than 15 grasshoppers per square metre are found in the crop. Repeat only when necessary. Use sufficient water for good coverage using ground or aerial application. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 7 Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
Sweet clover, red clover, alsike clover	Sweet clover weevils	1020 L - 1320 mL	28 days (Grazing or harvest)	Ground or aerial application. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 7 Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming

				period or during the 5-day period before the crop blooms.
Pastures, wasteland	Grasshoppers - nymphs	660 mL	2 days (Grazing or harvest)	Use higher rate for adult grasshopper control on wasteland. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 7 Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.
	Grasshoppers - adults	1020 – 1200 mL	28 days (Grazing or harvest)	
Wheat	Wheat midge, Say's stinkbug	1200 mL	35 day PHI (Pre-Harvest Interval) and 14-day PGI (Pre-Grazing Interval)	If adult midges are present (1 midge / 4-5 wheat heads), sprays should be applied when 25% of the wheat head has fully emerged from the boot but before flowering has begun. At this stage, wheat first becomes susceptible to attack by the egg-laying females. Applications should be made in the late afternoon or evening when temperatures exceed 15°C and the wind speed is less than 10 km/h. High volume sprays will improve penetration of the crop. Proper timing of application is essential for control. If midge population persists at 3 days apply a second treatment. DO NOT apply to areas where bees are actively foraging or near apiaries as product is toxic to bees. Consult proper authorities for further information concerning rates and time of application. Ground or aerial application. Use a water volume of at least 100 L/ha with ground equipment and 50 L/ha by air. Higher volume will provide more thorough coverage. Max Number of Applications per Year – 2

				Minimum Application Interval (Days) – 7 Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.
Wheat, oats, barley	Thrips	1200 mL	35 day PHI (Pre-Harvest Interval) 14 day PGI (Pre-Grazing Interval)	<u>Ground or aerial application:</u> Use sufficient water to obtain good coverage, (usually 110 - 275 L/ha). (Russian wheat aphids - suppression only.) Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 7 Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.
	Aphids	510 mL		
Flax	Potato aphid	512 mL	21 days	One application per season; apply from late flowering to early green bole stage in sufficient water to provide good coverage; may be applied by either ground or aerial methods. Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. .

** NOTE: Use sufficient water for good coverage when utilizing ground or aerial equipment.
This formulation is not suited to application in oil.
** NOTE: For each of the Field Crops: Apply at the recommended rate; do not exceed a maximum spray volume of 1000 L per hectare unless otherwise stated.

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than FMC of Canada Limited under the User Requested Minor Use Label Expansion program. For these uses, FMC of Canada Limited 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				
Annual canarygrass	Aphids	600 mL	21 days	Apply when more than 50 aphids per canary seed head between heading and the soft dough stage. Ground or aerial application. Max Number of Applications per Year – 1 Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. Annual canarygrass seeds can be harvested for human consumption. Annual canarygrass grown for human consumption is not to be cut for feed or grazed.

CAUTION:
Remove cattle prior to spraying.

TOXIC to bees. Avoid application during the crop blooming period. If applications must be made during the crop blooming period, restrict applications to evening when most bees are not foraging. When using managed bees for pollination services, DO NOT apply during the crop

blooming period.

Fruit Crops

DO NOT APPLY TO FRUIT CROPS BY AIR.

Fruit Crops	Insects Controlled	RATE OF CYGON 400EC INSECTICIDE PER			Pre harvest Interval	Remarks
		10 L water	1,000 L water	Hectare		
Pears	Aphids, mites, pear psylla	12 - 15 mL	1.2 - 1.5 L		28 days	Apply when insects first appear, using sufficient water for good coverage. Repeat as necessary. Apply at the recommended rate; do not exceed a maximum spray volume of 3000 L per hectare unless otherwise stated. Maximum rate is 1.44 kg a.i./ha (or max of 3.6 L of product per hectare) Apply at pre-bloom. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 10 <u>Restricted Entry Intervals (REI):</u> Thinning – 28 days Hand-line irrigation – 17 days All other activities – 1 day To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
	Tarnished plant bug	7.5 ml	750 mL			
Blueberry (lowbush)	Blueberry maggot	-	-	0.7- 1 L	21 days	Apply pesticide in sufficient water for good coverage one week after first berries ripen. Do not apply foliar spray when daytime temperatures exceed 25°C. Use no more than 1,000 L spray/ha. Apply a maximum of two applications per season. Date of first application should usually occur between July 5 and 15 depending on area and season. Apply second spray in 10 - 12 days if needed. <u>Restricted Entry Intervals (REI)</u> – 12 hours Minimum 21-day PHI (Pre-Harvest Interval) <u>Restricted Entry Intervals (REI)</u> – 12 hours Use an air-blast orchard sprayer to apply the pesticide. Weather conditions should be checked frequently (every 15 minutes) during application of CYGON 400EC INSECTICIDE by air-blast sprayer as wind speed and direction,
Blueberry (highbush)	Blueberry maggot Spotted-wing Drosophila (SWD) *Drosophila suzukii*			1 L	21 days	

						air temperature and relative humidity all affect the spray application of pesticides. Wind speed should be from 2 to 10 km/h. Relative humidity should not be less than 50%. Air temperature should not exceed 25°C. For control of Spotted Wing Drosophila: Apply post-harvest only, to control spotted wing Drosophila (adults and larvae in fruit) that may otherwise infest adjacent crops. Timing varies, depending on variety of highbush blueberry. Foliar application only, using conventional ground application equipment. Use sufficient water volume to ensure thorough coverage, to a maximum of 1000 L/ha. Maximum 2 applications per year with a reapplication interval of 15 days. To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
Peaches (non-bearing)	Tarnished plant bug Aphids, mites	6 mL 12 - 18 mL	600 mL 1.2 - 1.8 L	2 L -	40 day	Spray when insects first appear and repeat as necessary using sufficient water for good coverage. Apply at the recommended rate; do not exceed a maximum spray volume of 3000 L per hectare unless otherwise stated. Some defoliation may occur under cold wet soil and/or slow drying conditions during and following application. Least injury has occurred when sprays were applied in the morning while temperatures are moderate and drying conditions are fairly good. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 10 <u>Restricted Entry Intervals (REI):</u> Thinning – 32 days Hand-line irrigation – 20 days All other activities – 3 days To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.

Strawberries (bearing)	Tarnished plant bug	15 L	1.5 L	3.3 L	7 days	Tarnished plant bugs - Apply first spray when first blooms appear and the second application 10 to 12 days after if needed. Aphids, Mites - Spray when insects first appear and repeat as necessary using sufficient water for good coverage Apply at the recommended rate; do not exceed a maximum spray volume of 1000 L per hectare unless otherwise stated. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 10 Restricted Entry Interval (REI) – 2 days To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. Avoid application during the crop blooming period. If applications must be made during the crop blooming period, restrict applications to evening when most bees are not foraging. When using managed bees for pollination services, DO NOT apply during the crop blooming period.
Strawberries (bearing and non-bearing)	Aphids, mites (bearing, non-bearing)	12 mL	1.2 L	2.7 L		
Sweet cherries	Black and western cherry fruit fly maggots	6 mL	600 mL	2.7 L	21 days	Apply no later than 6 days after the first adult fly has been trapped. Apply once only. Apply at the recommended rate; do not exceed a maximum spray volume of 3000 L per hectare unless otherwise stated. <u>Restricted Entry Intervals (REI):</u> Thinning – 20 days Hand-line irrigation – 9 days All other activities – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
Sour cherries	Black and western cherry fruit fly maggots	6 mL	600 mL	2.7 L	21 days	Apply no later than 6 days after the first adult fly has been trapped and repeat in 14 days if required. Apply at the recommended rate; do not exceed a maximum spray volume of 3000 L per hectare unless otherwise stated. Max Number of Applications per Year – 2 <u>Restricted Entry Intervals (REI):</u> Thinning – 20 days Hand-line irrigation – 9 days All other activities – 12 hours

						To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.

Nut Crops

DO NOT APPLY TO NUT CROPS BY AIR.

Nut Crop	Insects Controlled	Rate of CYGON 400EC INSECTICIDE per Hectare	Pre harvest Interval	Remarks
Filberts, hazelnuts	Aphids	6 L	45 days	One application per season; apply when aphids appear; primarily for use on young plantlings. Apply at the recommended rate; do not exceed a maximum spray volume of 1000 L per hectare unless otherwise stated. <u>Restricted Entry Intervals (REI):</u> Thinning – 34 days Hand-line irrigation – 21 days All other activities – 5 days To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. Avoid application during the crop blooming period. If applications must be made during the crop blooming period, restrict applications to evening when most bees are not foraging. When using managed bees for pollination services, DO NOT apply during the crop blooming period.

Ornamental Shrubs & Trees (outdoor only)

DO NOT APPLY TO ORNAMENTAL SHRUBS AND TREES BY AIR.

Ornamental Shrubs & Trees (outdoor only)	Insects Controlled	RATE of CYGON 400EC INSECTICIDE Per		Remarks*
		10 litres water	1,000 litres water	
Arborvitae	Aphids, bagworms, mites	24 mL	2.4 L	Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 14 Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.
Birch	Aphids, leafminers	6 mL	600 mL	<u>Foliar spray:</u> For leaf miners, apply when leaves are expanded (about mid-May); repeat the last week in June. <u>Soil drench:</u> For full-season control, CYGON 400EC INSECTICIDE may be used as a soil drench once in early May when the leaves start to

				open. Apply CYGON 400EC INSECTICIDE undiluted at a rate of 13.2mL per cm of stem basal diameter (cumulative total of all stems) evenly into small, shallow holes made with a sharp instrument at the dripline of the tree or clump. Close the holes with soil. Drench thoroughly with water immediately so as to saturate the root system. One soil drench treatment in May should give control of birch leafminers for the complete season. DO NOT make more than 1 soil drench treatment per season. Soil drenches may not be effective on newly transplanted birches where the root system is not well established. Some hybrid varieties (e.g. cutleaf and silver birch) may be damaged by excessive amounts of CYGON 400EC INSECTICIDE. Therefore, apply no more than the recommended dosage. Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
Boxwood	Mites, leafminers, mealybugs	12 mL	1.2 L	For leaf miners, apply in the spring when leaf miners flies first appear or in early summer for control of larvae in the infested leaves. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 14 <u>Restricted Entry Intervals (REI):</u> Thinning – 7 days All other activities – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.

Cedar	Mites, leafminers	24 mL	2.4 L	For leaf miners apply in early May or late August. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 14 <u>Restricted Entry Intervals (REI):</u> Thinning – 18 days Hand-Line Irrigation – 3 days All other activities – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
Douglas-fir (seed tree)	*Cone insects:* cone or gall midges, cone moths, seed chalcids, scale midges	2.4 L per 100 litres of water. Maximum rate 24 L of product (= 9.6 kg a.i.) per hectare.		Application should be made when cones are at or near the pendant stage. Complete coverage of the cones and foliage in the cone-bearing area of the tree is important for satisfactory results. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 10 <u>Restricted Entry Intervals (REI):</u> Seed cone harvesting – 48 days Scouting – 5 days Grading, animal control, baiting – 1 day To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.
Larch	Cone maggots, seed wasps	60 mL	6 L	One application per season; apply within 3 weeks after pollination; sprayed to run-off on foliage; ground hydraulic sprayer or mist sprayer. Restricted Entry Interval (REI) – 1 day To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.

				TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
Holly (English, American)	Mites, soft scales, holly leafminer	12 mL	1.2 L	For leaf miners apply in spring when leaf miner flies first appear or in early summer for the control of larvae in the infested leaves. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 14 Restricted Entry Interval (REI) – 12 days To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
Juniper	Aphids, bagworms, midges, mites	24 mL	2.4 L	Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 14 Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.
Lilac (*Syringa spp*)	Leafminers	18 mL	1.5 L	Apply 2 sprays 6 weeks apart. Applications should be made as soon as any signs of the leaf miners appear or first application should be started in early June. Max Number of Applications per Year – 2 Restricted Entry Interval (REI) – 15 days To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
Oak	Golden oak scale	24 mL	2.4 L	Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 14 <u>Restricted Entry Intervals (REI):</u> Thinning – 18 days Hand-Line Irrigation – 3 days All other activities – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period

				before the crop blooms.
Pine (mugho, red, Scots)	Redheaded pine sawfly larvae	12 mL	1.2 L	For pine shoot moths apply in early spring and again in mid-June, thoroughly wetting branch tips. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 14 Restricted Entry Intervals (REI): Thinning – 18 days Hand-Line Irrigation – 3 days All other activities – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.
	Aphids, bagworms, European pine shoot moth, Nantucket pine tip moth, Zimmerman pine moth	24 mL	2.4 L	
Spruce (seed tree and woodland use)	Seed and cone insects		12.5 - 25 L per 1000 L water Maximum rate 25 L of product (10 kg a.i) per hectare	Thoroughly spray cone-bearing portions of tree to point of runoff when strobili cones are closed, and turning, but before they reach the horizontal position. Contact your local forest pest control office for more information on timing, and spray application, as well as spruce species that may be treated. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 10 Restricted Entry Intervals (REI): Seed Cone harvesting – 49 days Scouting – 5 days Hand pruning, staking, tying – 27 days Grading, animal control, baiting – 2 days To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.
Sitka spruce(seed tree)	Sitka spruce weevil	250 mL	25 L per 1000 litres of water Maximum rate 25L of product (= 10 kg a.i.) per hectare	Thoroughly spray the terminal growth to the point of runoff at the time of egg laying (usually during the first half of May). Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 10 Restricted Entry Intervals (REI): Seed Cone harvesting – 49 days Scouting – 5 days Hand pruning, staking, tying – 27 days Grading, animal control, baiting – 2 days To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.

Taxus (yew)	Mites, Fletcher scale, mealybugs	24 mL	2.4 L	For Fletcher scales, spray at the end of June and again 14 days later when crawlers are moving. Max Number of Applications per Year – 2 Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section.

* Apply at the recommended rate; do not exceed a maximum spray volume of 1000 L per hectare unless otherwise stated.

Flowering Plants

THE USES LISTED BELOW ARE FOLIAR SPRAYS UNLESS OTHERWISE INDICATED: (OUTDOOR PLANTS ONLY).

Flowering Plants	Insects Controlled		Rate of CYGON 400EC INSECTICIDE Per		Remarks*
			10 litres water	1,000 litres water	
Azaleas	Lace bugs, leafminers, mites, whiteflies		12 mL	1.2 L	Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 14 Restricted Entry Interval (REI) – 2 days To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
Camellias	Aphids, mites, camellia scale	Foliar Spray	12 mL	1.2 L	<u>Foliar spray:</u> Apply 2 sprays 6 weeks apart during the first year. In subsequent years make an application soon after first growth begins in the spring. <u>Soil drench:</u> Apply CYGON 400EC INSECTICIDE as a soil drench around the base of plants in early spring at the rate of 72 mL in 10 litres water per plant up to 2 metres tall. Increase the rate proportionately for larger plants. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 10 Restricted Entry Interval (REI) – 2 days To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
		Soil Drench	72 mL		
Day lilies	Aphids, thrips		24 mL	2.4 L	Max Number of Applications per Year – 1

				Restricted Entry Interval (REI) – 7 days To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
Euonymus	Aphids, scales	24 mL	2.4 L	Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 14 Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
Gardenias	Whiteflies	12 mL	1.2 L	Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 14 Restricted Entry Interval (REI) – 12 hours To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
Gerberas	Thrips	12 mL	1.2 L	Max Number of Applications per Year – 1 Restricted Entry Interval (REI) – 2 days To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
Gladioli	Aphids, thrips	12 mL	1.2 L	Max Number of Applications per Year – 1 Restricted Entry Interval (REI) – 2 days To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
Irises	Aphids, iris borer, thrips	24 mL	2.4 L	For borer control, spray when new leaves are 12 - 15 cm tall. Max Number of Applications per Year – 1 Restricted Entry Interval (REI) – 7 days

				To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
Poinsettias (outdoor plants)	Aphids, whiteflies, mites, mealybugs	12 mL	1.2 L	Max Number of Applications per Year – 1 Restricted Entry Interval (REI) – 2 days To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.
Roses	Aphids, leafhoppers, mites, thrips	12 mL	1.2 L	Spray during growing season. Max Number of Applications per Year – 2 Minimum Application Interval (Days) – 28 Restricted Entry Interval (REI) – 2 days To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.

Rotational Crops

Resistance Management Recommendations

For resistance management, please note that CYGON 400EC INSECTICIDE contains a Group 1B insecticide. Any insect population may contain individuals naturally resistant to CYGON 400EC INSECTICIDE and other Group 1B insecticides. The resistant individuals may dominate the insect population if this group of insecticides is used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but are 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 CYGON 400EC INSECTICIDE or other Group 1B insecticides with different groups that control the same pests.
- 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 and 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 or to report suspected resistance contact FMC of Canada Limited at 1-833-362-7722 or at www.fmccrop.ca.