2020-0145
2021-02-11
(Container Label)

Group	1B	Insecticide

CYGON® 480 EC
SYSTEMIC INSECTICIDE

NET CONTENTS: 10L

AGRICULTURAL

READ THE LABEL AND THE BOOKLET BEFORE USING

Emulsifiable concentrate contains dimethoate

A Systemic insecticide for the control of insects on listed flowering plants, ornamental shrubs, trees, vegetable, fruit and field crops.

ACTIVE INGREDIENT: Dimethoate 480 g/L

REGISTRATION NO. 9807 PEST CONTROL PRODUCTS ACT

DANGER  **POISON**

Interprovincial Cooperative Limited,
P.O. Box 1050, Saskatoon, Saskatchewan S7K 3M9
1-204-233-3461

PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN. May be harmful or fatal if swallowed, inhaled or absorbed through the skin. Avoid breathing vapour or spray mist. Use only with adequate ventilation. Avoid contact with skin and eyes. Wash thoroughly after handling and before eating and smoking. Avoid contamination of food or feed products. Do not use in milk processing or milk storage rooms. Do not contaminate feed, foodstuffs, feed troughs or drinking fountains. Do not mix with whitewash or apply within 2 weeks of whitewashing. Do not use in homes. 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. Keep away from heat, sparks and open flame. Do not expose to direct sunlight. Ship and store between 4°C and 30°C. Remove animals from treatment area during application. Highly toxic to birds, bees and other wildlife. Do not treat crops when bees are foraging. 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. Not for use in greenhouses. 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.

ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT: Please refer to the label for specific directions, equipment and controls regarding mixing/loading liquids and application by: air, groundboom, airblast, handheld equipment, manually-pressurized handwand or backpack, right-of-way sprayer, soil drench, soil injection or chemigation.

ENVIRONMENTAL PRECAUTIONS: TOXIC to bees. Bees may be exposed through direct spray, spray drift, and residues on 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. TOXIC to birds, mammals and aquatic organisms. Observe spray buffer zones specified under DIRECTIONS FOR USE. This product contains petroleum distillate which is moderately to highly toxic to aquatic organisms. Avoid contamination of aquatic systems during application. Do not contaminate these systems through direct application, disposal of waste or cleaning equipment. To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to: heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (for example, soils that are compacted or fine textured such as clay).
Avoid application of this product when heavy rain is forecast. Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

FIRST AID: 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. Never 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. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

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

2020-0145
2021-02-11

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.

RINSING AND DISPOSAL: 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. 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.

SPILLAGE: If accidental spillage of CYGON 480 EC SYSTEMIC 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 may be necessary on plain wood surfaces. Avoid spillage on all types of floor tile or linoleum.

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.

2020-0145
2021-02-11
(Detachable booklet)

Group	1B	Insecticide

CYGON® 480 EC
SYSTEMIC INSECTICIDE

NET CONTENTS: 10L

AGRICULTURAL

READ THE LABEL AND THE BOOKLET BEFORE USING

Emulsifiable concentrate contains dimethoate

A Systemic insecticide for the control of insects on listed
flowering plants, ornamental shrubs, trees, vegetable, fruit and field crops.

ACTIVE INGREDIENT: Dimethoate 480 g/L

REGISTRATION NO. 9807 PEST CONTROL PRODUCTS ACT

DANGER  **POISON**

Interprovincial Cooperative Limited,
P.O. Box 1050, Saskatoon, Saskatchewan S7K 3M9
1-204-233-3461

RC 544-0316

2020-0145
2021-02-11

CYGON® 480 EC SYSTEMIC INSECTICIDE

GENERAL USES:
CYGON 480 EC SYSTEMIC INSECTICIDE is generally effective in controlling aphids, grasshoppers, houseflies, leafhoppers, leafminers, mites, scales, tarnished plant bugs and thrips.

PRECAUTIONS:
KEEP OUT OF REACH OF CHILDREN. May be harmful or fatal if swallowed, inhaled or absorbed through the skin. Avoid breathing vapour or spray mist. Use only with adequate ventilation. Avoid contact with skin and eyes. Wash thoroughly after handling and before eating and smoking. Avoid contamination of food or feed products. Do not use in milk processing or milk storage rooms. Do not contaminate feed, foodstuffs, feed troughs or drinking fountains. Do not mix with whitewash or apply within 2 weeks of whitewashing. Do not use in homes. 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. Keep away from heat, sparks and open flame. Do not expose to direct sunlight. Ship and store between 4°C and 30°C. Remove animals from treatment area during application. Highly toxic to birds, bees and other wildlife. Do not treat crops when bees are foraging. 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. Not for use in greenhouses. 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.

ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT:
A. Mixing/loading liquids (for all uses except forestry): Wear chemical resistant coveralls over long pants and a long-sleeved shirt, chemical resistant footwear plus socks, chemical resistant gloves, goggles or a face shield and suitable respiratory protection. Suitable respiratory protection is defined as either a respirator with a NIOSH approved organic-vapour-removing cartridge with a prefilter approved for pesticides or a NIOSH approved canister approved for pesticides.
B. Mixing/loading liquids (forestry: hemlock, spruce and balsam fir): Use a closed system for aerial mixing/loading for forestry use (hemlock, spruce and balsam fir). Wear cotton coveralls over long pants and a long-sleeved shirt, chemical resistant footwear plus socks, chemical resistant gloves, goggles or a face shield.
C. Mixing/loading liquids (forestry: Douglas-fir (seed tree), Sitka spruce (seed tree), spruce (seed tree and woodland)): During mixing, loading, clean-up and repair, wear chemical resistant coveralls over long pants and a long-sleeved shirt, chemical resistant footwear plus socks, chemical resistant gloves, goggles or a face shield and suitable respiratory protection. Suitable respiratory protection is defined as either a respirator with a NIOSH approved organic-vapour-removing cartridge with a prefilter approved for pesticides or a NIOSH approved canister approved for pesticides.
D. Applying by air: Wear cotton coveralls over long pants, and a long-sleeved shirt, shoes, plus socks.
E. Applying by groundboom: During groundboom application 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 cotton coveralls over long pants and a long-sleeved shirt, chemical resistant footwear plus socks. Chemical resistant gloves are not required to be worn while driving closed cab equipment but are required for clean-up and repair activities.
F. Applying by airblast: During airblast application 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 cotton coveralls over long pants and a long-sleeved shirt, chemical resistant footwear plus socks. Chemical resistant gloves are not required to be worn while driving closed cab equipment but are required for clean-up and repair activities.
   If a closed cab is not feasible, wear chemical resistant coveralls over long pants and a long-sleeved shirt, chemical resistant footwear plus socks, chemical resistant gloves and chemical-resistant headgear. Chemical resistant headgear includes sou'westers, or large brimmed, water-proof hats, and hoods with sufficient neck protection. Avoid touching face or other unprotected parts of the body during application.

G. Applying by handheld equipment: Wear chemical resistant coveralls over long pants and a long-sleeved shirt, chemical resistant footwear plus socks, chemical resistant gloves and suitable respiratory protection. Suitable respiratory protection is defined as either a respirator with a NIOSH approved organic-vapour-removing cartridge with a prefilter approved for pesticides or a NIOSH approved canister approved for pesticides. 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) when applying by handheld equipment.

H. Applying by manually-pressurized handwand or backpack (Douglas-fir (seed tree), Sitka spruce (seed tree), spruce (seed tree and woodland)): During manually-pressurized handwand, or backpack application, wear chemical resistant coveralls over long pants and a long-sleeved shirt, chemical resistant footwear plus socks, chemical resistant gloves and suitable respiratory protection. Suitable respiratory protection is defined as either 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 apply using mechanically-pressurized handgun equipment. Only for use with manually-pressurized hand wands or backpack sprayers.

I. Applying by right-of-way sprayer: During mixing, loading, application, clean-up and repair, wear chemical resistant coveralls over long pants and a long-sleeved shirt, chemical resistant footwear plus socks, chemical-resistant gloves, goggles or a face shield.

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

ENVIRONMENTAL PRECAUTIONS:

TOXIC to bees. Bees may be exposed through direct spray, spray drift, and residues on 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.

TOXIC to birds, mammals and aquatic organisms. Observe spray buffer zones specified under DIRECTIONS FOR USE.

This product contains petroleum distillate which is moderately to highly toxic to aquatic organisms. Avoid contamination of aquatic systems during application. Do not contaminate these systems through direct application, disposal of waste or cleaning equipment. To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to: heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (for example, soils that are compacted or fine textured such as clay).

Avoid application of this product when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

FIRST AID:

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. Never 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. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

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.

RINSING AND DISPOSAL:
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. 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.

SPILLAGE:
If accidental spillage of CYGON 480 EC SYSTEMIC 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 may be necessary on plain wood surfaces. Avoid spillage on all types of floor tile or linoleum.

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.

DIRECTIONS FOR USE:

ORNAMENTAL, CROP AND FORESTRY USES

GENERAL USE PRECAUTIONS:

1. CYGON 480 EC SYSTEMIC 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 predicable nor common to all members of the species.
2. FOR PROPER TIMING of treatments for the control of specific pests on ornamental plants, 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 over-spray.
3. EXPERIENCE has shown when dealing with species that may be injured by foliar application, soil drenches are safer on those plants for which they are recommended. When using foliar sprays, do not apply during heat of the day or when temperatures are excessively high.
4. DO NOT USE on ornamental plants not listed. While CYGON 480 EC SYSTEMIC INSECTICIDE may not always cause injury to species not listed, injury may occur to individual plants or in local areas.
5. WHEN IN DOUBT about plant safety it is advisable to spray a single branch or dip several leaves in the spray solution. A waiting period of three or four days will usually indicate if plant damage will result.
6. DO NOT SPRAY the following species unless you have tested single branches or leaves to ascertain safety:

   American Elm — Mop-head Elm
   Norway Maple — Mock Orange
   Sunburst Locust — Morraine Locust
   or other ornamentals not listed in this pamphlet.
7. There has been no report of damage by CYGON 480 EC SYSTEMIC INSECTICIDE to any of the common evergreen species grown in Canada provided recommended rates have been followed.
8. This product is toxic to bees. Restrict application to the period after dark when bees are inside the hives, or in the early morning before the bees are foraging in the fields. Do not apply to such crops as alfalfa when in full bloom.
9. 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.
10. If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web-site at www.croplife.ca.

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 the application site as measured 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.

PRECAUTIONS FOR AERIAL APPLICATION (See specific crop sections) :
Use special care in aerial application 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. Specified buffer zones should be observed. Do not contaminate water by cleaning of equipment or disposal of wastes.
Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). 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. Do not use human flaggers.

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 8 km per hour.

Operator Precautions

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilot has communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.
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.

Pollinator Protection:
To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. Refer to the use directions for crop specific application information.

Product Specific Precautions: Read and understand the entire label and booklet before opening this product. If you have questions, call the manufacturer at 204-233-3461 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:

Volume: A minimum volume of 30 L per hectare of spray solution should be used. Use boom pressure of 235 kpa or less. Avoid placing nozzles where spray will enter wing tip vortices.

Spray Buffer Zones to Protect Sensitive Habitat:

Spot treatments using hand-held equipment do not require a spray buffer zone. Use of soil drench or soil incorporation do not require a spray buffer zone.

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.

When a tank mixture is used, consult the labels of the tank-mix partners and observe the largest (most restrictive) 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.

Method of application	Crop	Spray Buffer Zones (metres) Required for the Protection of:			
		Freshwater Habitat of Depths:		Estuarine/Marine Habitat of Depths:	
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m
Field sprayer	**Field crops**				
	Canary grass (seed production), flax	1	0	1	0
	Canola (rape)	1	1	1	1
	Alfalfa (forage and seed production), clover (sweet, red, alsike), cereals (barley, oats, rye, wheat), forage crops (clover, grasses, hay, grain), non-cropland (fence rows, field edges except adjacent to unregistered crops), pastures and wastelands, safflower, soybeans	2	1	1	1
	Vegetables				
	Peas (field and/or canning)	1	0	1	0
	Beans (pole, snap), beets, celery, eggplant, leafy vegetables (beet greens, kale, leaf lettuce, Swiss chard, turnip greens)	1	1	1	1
	Bok choi (pak choi), chicory, Chinese broccoli, cole crops (brussel sprouts), peppers, potatoes, tomatoes	2	1	1	1
	Cole crops (broccoli, cauliflower)	2	1	2	1
	Asparagus	3	1	2	1
	Berries				
	Blueberry (low and highbush)	1	1	1	1
	Strawberries	3	2	3	1
	Outdoor ornamental trees and shrubs				
	Birch	1	0	1	0
	Boxwood, hemlock, holly (English, American)	1	1	1	1
	Christmas Trees: Balsam fir, hemlock, pine (Mugho, red, Scots), spruce; Ornamental trees: Arborvitae, cedar, juniper, oak, pine (Mugho, red, Scots), Taxus (yew), lilac (Syringa spp.)	2	1	2	1
	Larch	3	2	4	2
	Douglas-fir (seed tree), spruce (seed tree and woodland)	10	5	10	5

	Sitka spruce (seed tree)		15	5	10	5
	Ornamental plants					
	Azaleas, camellias, gardenias, gerberas, gladioli, poinsettias, roses		1	1	1	1
	Day lilies, Euonymus, irises		2	1	2	1
Airblast	**Orchards**					
	Cherries (sour, sweet)	Early growth stage	10	4	10	3
		Late growth stage	5	2	4	2
	Tree nuts (filberts, hazelnuts)	Early growth stage	15	5	20	10
		Late growth stage	5	3	10	4
	Pears	Early growth stage	15	5	15	5
		Late growth stage	10	3	5	3
	Peaches	Early growth stage	20	10	15	5
		Late growth stage	10	4	10	4
	Berries					
	Blueberry (low and highbush)	Early growth stage	4	1	3	1
		Late growth stage	2	1	2	1
	Outdoor ornamental trees and shrubs					
	Birch	Late growth stage	1	0	1	0
	Boxwood, hemlock, holly (English, American)	Late growth stage	2	1	2	1
	Lilac (Syringa spp.)	Late growth stage	3	1	3	1
	Christmas Trees: Balsam fir, hemlock, pine (Mugho, red, Scots), spruce; Ornamental trees: Arbour vitae, cedar, juniper, oak, pine (Mugho, red, Scots), Taxus (yew)	Late growth stage	4	2	4	2
	Larch	Late growth stage	5	3	10	4
	Spruce (seed tree and woodland)	Late growth stage	20	10	25	15
	Douglas fir (seed tree)	Late growth stage	25	15	20	15

	Sitka spruce (seed tree)	Late growth stage	25	15	25	15
	Ornamental plants					
	Poinsettias, roses	Late growth stage	2	1	2	1
	Euonymus	Late growth stage	4	2	4	2
Aerial	**Field crops**					
	Canary grass (seed production), flax	Fixed wing	1	0	1	0
		Rotary wing	1	0	1	0
	Canola (rape)	Fixed wing	5	1	2	1
		Rotary wing	3	1	1	1
	Alfalfa (forage and seed production), clover (sweet, red, alsike)	Fixed wing	10	1	5	1
		Rotary wing	5	1	3	1
	Cereals (barley, oats, rye, wheat), forage crops (clover, grasses, hay, grain), non-cropland (fence rows, field edges except adjacent to unregistered crops), pastures and wastelands, safflower, soybeans	Fixed wing	10	1	5	1
		Rotary wing	5	1	1	1
	Vegetables					
	Peas (field and/or canning)	Fixed wing	1	0	1	0
		Rotary wing	1	0	1	0
	Beans (pole, snap), soybeans	Fixed wing	5	1	5	0
		Rotary wing	3	1	1	0
	Berries					
	Blueberry (low and highbush)	Fixed wing	4	1	1	1
		Rotary wing	1	1	1	1
	Forestry					
	Hemlock, spruce, balsam fir	Fixed wing	90	0	150	15
		Rotary wing	55	0	90	1

*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 Pest Management Regulatory Agency web site.

RESISTANCE MANAGEMENT RECOMMENDATIONS:
For resistance management, please note that CYGON 480 EC SYSTEMIC INSECTICIDE contains a Group 1B insecticide. Any insect population may contain individuals naturally resistant to CYGON 480 EC SYSTEMIC INSECTICIDE and other Group 1B insecticides. The resistant individuals may dominate the insect population if this group of insecticides are 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 480 EC SYSTEMIC INSECTICIDE or other Group 1B 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 or to report suspected resistance contact Interprovincial Cooperatives Ltd. at (204) 233-3461.

CROP SPECIFIC APPLICATIONS:
For each of the crops below, apply CYGON 480 EC SYSTEMIC INSECTICIDE in sufficient water for good coverage. Repeat applications as necessary or as otherwise directed, except that label directions concerning required interval before harvest must be observed.

VEGETABLE CROPS:
CYGON 480 EC is 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. For Asparagus, DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.

VEGETABLE CROPS	INSECTS CONTROLLED	RATE OF CYGON 480 EC PER:		PREHARVEST INTERVALS (DAYS)	MAXIMUM # APPLICATIONS PER SEASON	MINIMUM APPLICATION INTERVAL (DAYS)
		10 L WATER	HECTARE			
Asparagus	Asparagus aphid	35 mL	2.3 L	NA	2	7
	Remarks: Ground application ONLY. Apply by boom or field sprayer using 675 L of water/ha. Dimethoate should be applied postharvest only, but if applied on immature asparagus do not harvest for feed or food.					
Beans (Pole, Snap)	Aphids, Grasshoppers, Bean beetles, leafhoppers, leafminers, lygus bugs, mites, tarnished plant bugs.	7-10 mL	700 mL-1 L	7	2	7
	Remarks: Apply by ground or aerial application. Do not feed or allow livestock to graze treated forage.					
Beets	Tarnished plant bugs.	7 mL	700 mL	12	2	7
	Remarks: Ground application ONLY.					
Bok Choi, Chicory, Chinese Broccoli	Aphids	6-10 mL	600 mL-1 L	7	2	7
	Remarks: Ground application ONLY. Apply in sufficient water for thorough coverage. Use ground application to foliage. Apply when aphids are present.					
Cole Crops: Broccoli, Brussels sprouts, Cauliflower	Aphids	7-10 mL	700 mL-1 L	Brussels sprouts – 21 Broccoli, Cauliflower – 7	2	7
	Remarks: Ground application ONLY.					

Broccoli, Cauliflower	Thrips	6-12 mL	550 mL-1.25 L	7	2	7
	Remarks: Ground application ONLY. Apply at 10 day intervals starting at head formation.					
Celery	Aphids, including carrot, green peach and foxglove aphids	7 mL	700 mL	7	2	7
	Remarks: Ground application ONLY. Begin application 3 weeks after transplanting.					
Eggplant	Tarnished plant bug	5-7 mL	500-700 mL	7	2	7
	Remarks: Ground application ONLY. Apply when bugs are found and flowering is seen. Treat again in 7-10 days if bugs are found. Consult local authorities for proper timing. Do not apply when bees are foraging.					
Leafy Vegetables: Beet greens, Kale, Lettuce*, Swiss chard, Turnip greens *do not apply to head lettuce	Aphids, Leafhoppers	7 mL	700 mL	Beet greens - 12 Kale, Lettuce*, Swiss chard, Turnip greens – 14	2	Beet Greens, Lettuce*, Swiss Chard, Turnip Greens - 7 Kale - 15
	Remarks: Ground application ONLY. Use sufficient water for good coverage.					
Peas (canning and field)	Aphids	2.5-3.6 mL	275-380 mL	3	2	7
	Remarks: Apply by ground or aerial application. Use sufficient water for good coverage. Repeat application as necessary. Do not feed or graze for forage within 21 days after last application. Dilute for ground (100-300 L of water/ha) and aerial application (10-30 L of water/ha).					
Peppers	Aphids, Maggots	7-10 mL	700 mL-1 L	3	2	7
	Remarks: Ground application ONLY.					
Potatoes, Tomatoes (field)	Aphids, Leafhoppers, Tarnished Plant Bugs	5-9 mL	550 mL-1 L	7	2	7
	Remarks: Ground application ONLY. Consult local agricultural authorities for proper timing.					

FIELD CROPS:

CYGON 480 EC is 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. For Alfalfa, Canola, Safflower and Clovers, DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms. NB. Cereals (wheat, oats, barley and rye) do not require specific pollinator toxicity precautionary directions.

FIELD CROPS	INSECTS CONTROLLED	RATE OF CYGON 480 EC PER HECTARE	PREHARVEST & PREGRAZING INTERVALS (DAYS)	MAXIMUM # APPLICATIONS PER SEASON	MINIMUM APPLICATION INTERVAL (DAYS)
Alfalfa (for seed and forage production)	Aphids, leafhoppers, reduction of alfalfa weevil larvae, lygus bugs, plant bugs	425 mL	10 days PHI/PGI	2	7
	Blotch leafminers	550 mL		1	NA
	Remarks: Apply by ground or aerial application. Use a water volume of at least 200 L/ha with ground equipment for Blotch leafminers. Do not apply during bloom.				
	Grasshoppers-nymphs	550 mL	10 days PHI/PGI	1	NA
	Grasshoppers-adults or winged	850-900 mL		2	7
	Remarks (Grasshoppers): Apply by ground or aerial application. Follow provincial forecast. Apply when insects are present as young hoppers or signs of insect damage are evident. Apply when the grasshoppers are in the 2-4 nymphal stage. Best control will be achieved when application is made prior to wing development. Under severe insect pressure, application should also be made to a 15 metre strip along fence rows around the field. DO NOT APPLY TO ADJACENT UNREGISTERED CROPS. The higher rate should be used when the proportion of mature and late nymphal stages in the population are high and spray penetration is inhibited by dense crop canopy.				
Alfalfa (seed production only)	Lygus bugs, Plant bugs	1.1 L	28	1	NA
	Remarks: Apply by ground or aerial application. Apply just before alfalfa begins to bloom. Allow at least 10 days before placing leaf cutting bees in the field.				
Canary Grass (Grown for seed)	Aphids	500 mL	21	2	30
	Remarks: Apply by ground or aerial application. Apply when there are more than 50 aphids per canary seed head between heading and soft dough stage.				
Canola	Aphids, Leafhoppers, Grasshoppers	850-900 mL	21	2	7
	Remarks: Apply by ground or aerial application.				
Cereals- wheat, oats, barley, rye	Grasshoppers-nymphs, Say stink bugs	550 mL	35 days PHI	2	7
	Grasshoppers-adults	850 mL–1 L	14 days PGI	2	7
	Remarks (Grasshoppers): Apply by ground or aerial application. Follow provincial forecast. Apply when the grasshoppers are in the 2-4 nymphal stage. Best control will be achieved when application is made prior to wing development. Under severe insect pressure application should also be made to a 15 metre strip along fence rows around the field. DO NOT APPLY TO ADJACENT UNREGISTERED CROPS. The higher rate should be used when the proportion of mature and late nymphal stages in the population are high and spray penetration is inhibited by dense crop canopy.				
	Aphids (wheat, oats, and barley only)	425 mL	35 days PHI 14 days PGI	2	7
	Thrips (wheat, oats, and barley only)	1L	35 days PHI 14 days PGI	2	7
	Remarks (Aphids and Thrips): Apply by ground or aerial application. For ground application, use sufficient water to obtain good coverage (usually 110 - 275 L/ha). With aerial equipment, use 10 to 30 L of water per hectare.				
	Orange blossom wheat midge, Russian wheat aphid (wheat only)	1 L	35 days PHI 14 days PGI	2	7
	Remarks: Apply by ground or aerial application. If midge population persists at 3 - 7 days apply a second treatment. 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. 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 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. Higher volume sprays will improve penetration of the crop. Proper timing of application is essential for control. Do not apply to areas where bees are actively foraging or near apiaries as product is toxic to bees. Consult provincial authorities for further information concerning rates and time of application.				
Flax	Potato Aphid	430 mL	21	1	NA

	Remarks: Apply by ground or aerial application. Apply from late flowering to early green bole stage; in sufficient water to provide good coverage. Use in 200 L/ha of water for ground and 11 - 22 L of water/ha for aerial equipment.				
Pastures, Waste areas	Grasshoppers - nymphs	550 mL	2	2	7
	Grasshoppers - adults	850 mL-1L	7	2	7
	Remarks: Apply by ground or aerial application. Follow provincial forecast. Apply when insects are present as young hoppers or signs of insect damage are evident. Apply when the grasshoppers are in the 2-4 nymphal stage. Best control will be achieved when application is made prior to wing development. Under severe insect pressure application should also be made to a 15 metre strip along fence rows around the field. DO NOT APPLY TO ADJACENT UNREGISTERED CROPS. The higher rate should be used when the proportion of mature and late nymphal stages in the population are high and spray penetration is inhibited by dense crop canopy. Use high rate for adult grasshopper control on wasteland. Remove cattle before spraying.				
Safflower	Grasshoppers (nymphs and adults)	550 mL-1 L	21	2	7
	Remarks: Apply by ground or aerial application. Apply when damage is apparent and more than 15 grasshoppers per square meter are found in the crop. Repeat the application only when necessary. Use sufficient water for good coverage.				
Soybeans	Aphids, bean beetles, leafhoppers, tarnished plant bugs, lygus bugs	700 mL-1 L	30	2	7
	Remarks: Apply by ground or aerial application. Use sufficient water for good coverage. Repeat applications as necessary. Do not feed or graze treated foliage to livestock.				
	Spider mites (Two-spotted)	1 L	30	2	7
	Remarks: Apply by ground or aerial application. Apply by ground application in sufficient water for thorough coverage. Do not feed or allow livestock to graze treated forage.				
Sweet Clover, Red Clover, Alsike Clover	Sweet clover weevil	850 mL-1.1 L	28	2	7
	Remarks: Apply by ground or aerial application. Do not graze or harvest for forage within 28 days after treatment.				

FRUIT CROPS:

APPLY WITH GROUND EQUIPMENT ONLY UNLESS OTHERWISE NOTED. FOR DILUTE GROUND APPLICATIONS, USE DESIGNATED AMOUNT OF CYGON 480 EC SYSTEMIC INSECTICIDE IN 1000 LITRES OF WATER UNLESS OTHERWISE SPECIFIED. For fruit trees (pears, cherries, peach), apply at the recommended rate; do not exceed a maximum spray volume of 3000 L per hectare unless otherwise stated. The rate per hectare is based on using 3000 L of spray on full sized trees, 4.5-5.5 metres high. Trees smaller or larger may require more or less CYGON 480 EC SYSTEMIC INSECTICIDE. Follow provincial calendar guidelines as to water volumes for the size of tree being sprayed. CYGON 480 EC is 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. For Blueberries, Cherries, Pears and Peaches, DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.

FRUIT CROPS	INSECTS CONTROLLED	RATE OF CYGON 480 EC PER:		PREHARVEST INTERVALS (DAYS)	MAXIMUM # APPLICATIONS PER SEASON	MINIMUM APPLICATION INTERVAL (DAYS)
		1000 L WATER	HECTARE			
Blueberry (Lowbush and Highbush)	Blueberry maggot	580-825 mL	NA	21	2	10-12 days
	Remarks: Apply by ground or aerial application. Apply pesticide in sufficient water for good coverage, one week after first berries ripen. Do not apply foliar spray when daytime temperatures are over 25°C. Use no more than 1000 L spray/ha. Make 1 or 2 applications between mid to late July, 10-12 days apart. May vary depending on area and season. If using an air-blast orchard sprayer to apply CYGON 480 EC SYSTEMIC INSECTICIDE, weather conditions should be checked frequently (every 15 minutes) during application as wind speed and direction, 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.					
Cherries (sweet and sour)	Black and western cherry fruit fly maggots.	500 mL	2.25 L	21	Sweet cherries: 1 Sour cherries: 2	Sweet cherries: NA Sour cherries: 14
	Remarks: Ground application ONLY. Apply no later than 6 days after the first adult fly is trapped. Apply once only to sweet cherries prior to harvest. On sours, 2 applications, 14 days apart, may be necessary.					
Filberts, Hazelnuts	Aphids	NA	5 L	45	1	NA
	Remarks: Ground application ONLY. Use one application per season. Apply when aphids appear. Primarily for use					

	on young plants.					
Pears	Aphids, mites, pear psylla	1-1.25L	NA	28	2	10
	Remarks: Ground application ONLY. Apply when insects first appear using sufficient water for good coverage. Repeat as necessary.					
	Tarnished Plant bugs	625 mL	NA	28	2	10
	Remarks: On pears apply at pre-bloom.					
Peaches (non-bearing)	Tarnished Plant bugs	550 mL	1.75 L	40	2	10
	Remarks: Ground application ONLY. Apply first spray at pink and repeat at shuck fall.					
	Aphids, mites	1-1.5L	NA	40	2	10
	Remarks: Spray when insects first appear and repeat at monthly intervals or as necessary using sufficient water for good coverage. 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 good.					
Strawberries (bearing)	Tarnished plant bugs, aphids, mites	1.25L	2.75 L	7	2	10
	Remarks: Ground application ONLY. Apply first spray when first blooms appear and the second application 10 to 12 days later.					
Strawberries (non-bearing)	Aphids, mites	1 L	2.25 L	7	2	10
	Remarks: Ground application ONLY. Spray when insects first appear and repeat at monthly intervals or as necessary, using sufficient water for good coverage.					

FLOWERING PLANTS:

The uses listed below are foliar sprays unless otherwise indicated (Outdoor plants only). DO NOT APPLY BY AIR. CYGON 480 EC is TOXIC to bees. DO NOT apply during the crop blooming period or during the 5-day period before the crop blooms.

FLOWERING PLANTS	INSECTS CONTROLLED	RATE OF CYGON 480 EC PER:		MAXIMUM # APPLICATIONS PER SEASON	MINIMUM APPLICATION INTERVAL (DAYS)
		10 L WATER	1000 L WATER		
Azaleas	Lace bugs, leaf miners, mites, white flies	10 mL	1 L	2	14
Camellias	Aphids, mites, camellia scale	10 mL	1 L	2	10
	Foliar spray: Apply 2 sprays 6 weeks apart the first year followed by annual applications soon after first growth begins in the spring. **Soil drench**: Apply CYGON 480 EC SYSTEMIC INSECTICIDE as a soil drench around the base of plants in early spring at the rate of 60 mL in 10 litres of water per plant up to 2 metres tall. Increase this rate proportionately for larger plants.				
Day Lilies	Aphids, thrips	20 mL	2 L	1	NA
Euonymus	Aphids, scale	20 mL	2 L	2	14
Gardenias	White flies	10 mL	1 L	2	14
Gerberas	Thrips	10 mL	1 L	1	NA
Gladiolus	Aphids, thrips	10 mL	1 L	1	NA
Iris	Aphids, iris borer, thrips	20 mL	2 L	1	NA
	Remarks: For borer control spray when new leaves are 12-15cm tall.				
Poinsettias (outdoor plants)	Aphids, white flies, mites, mealy bugs	10 mL	1 L	1	NA
Roses (outdoor plants)	Aphids, leaf hoppers, mites, thrips	10 mL	1 L	2	10
	Remarks: Apply thoroughly every 4 weeks during growing season.				

ORNAMENTAL SHRUBS (Outdoor Plants Only)

DO NOT APPLY BY AIR. NB. CYGON 480 EC is TOXIC to bees. For Holly and Lilac trees, 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. NB. Arborvitae, Juniper and Taxus trees do not require specific pollinator toxicity precautionary directions.

ORNAMENTAL SHRUB	INSECTS CONTROLLED	RATE OF CYGON 480 EC PER		MAXIMUM # APPLICATIONS PER SEASON	MINIMUM APPLICATION INTERVAL (DAYS)
		10 L WATER	1000 L WATER		
Arborvitae	Aphids, bagworms, mites	20 mL	2 L	2	14

Holly (English and American)	Mites, soft scale leaf miners	10 mL	1 L	2	14
	Remarks: 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.				
Juniper	Aphids, bagworms, Midges, miners	20 mL	2 L	2	14
Lilac (Syringa spp.)	Leaf miners	12.5 mL	1.25 L	2	42
	Remarks: Apply two sprays 6 weeks apart. Applications should be made as soon as any signs of the leaf miner appear or first application should be started in early June.				
Taxus	Mites, Fletcher Scale, mealy bugs	20 mL	2 L	2	14
	Remarks: For Fletcher scale spray at the end of June and again 20 days later when the crawlers are moving.				

ORNAMENTAL, FORESTRY, AND CHRISTMAS TREES:

GROUND APPLICATION ONLY (Unless Specified). NB. Cygon 480 EC is TOXIC to bees. For Birch, Boxwood, Cedar and Oak trees, 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. NB. Christmas, Douglas-Fir, Hemlock, Pine and Spruce trees do not require specific pollinator toxicity precautionary directions.

TREE	INSECTS CONTROLLED	RATE OF CYGON 480 EC PER		MAXIMUM # APPLICATIONS PER SEASON	MINIMUM APPLICATION INTERVAL (DAYS)
		10 L WATER	1000 L WATER		
Birch	Aphids, birch leaf miners	5 mL	500 mL	Foliar spray: 2 Soil drench: 1	Foliar spray: 42 Soil drench: NA
	FOLIAR SPRAY: For leaf miners apply when leaves are expanded (about mid-May); repeat the last week in June. SOIL DRENCH: For full-season control CYGON 480 EC SYSTEMIC INSECTICIDE may be used as a soil drench once in early May when the leaves start to open. Apply CYGON 480 EC SYSTEMIC INSECTICIDE undiluted at a rate of 11 mL/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 of 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 one 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 480 EC SYSTEMIC INSECTICIDE. Therefore, apply no more than the recommended dosage.				
Boxwood	Mites, Leaf miners, mealy bugs	10 mL	1 L	2	14
	Remarks: For leaf miners, apply in spring when leaf miner flies first appear or in early summer for control of larvae in the infested leaves.				
Cedar	Mites, Leaf miners	20 mL	2 L	2	14
	Remarks: For leaf miners apply in early May or late August.				
Christmas Trees: Balsam Fir, Spruce, Hemlock, Pine (Mugho, Red, Scots)	Aphids, mites, scales, Spruce needle miners, Spruce budworms	15 mL	1.5 L	2	14
	Bagworms, European pine shoot moths, Nantucket pine tip moths, Zimmerman pine moths	20 mL	2 L	2	14
Douglas-Fir (seed tree)	Cone insects (cone or gall midges, cone moths, seed chalcids, scale midges).	2 L per 100 L of water.		2	10
	Remarks: Maximum rate 20 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. Maximum of two applications per year.				
Hemlock	Mites, scale, spruce needle miners, spruce budworm	10 mL	1 L	2	14
Oak	Golden oak scale	20 mL	2 L	2	14
Pine (mugho, red, Scots)	Red and black- headed pine sawfly larvae	10 mL	1 L	2	14
	Aphids, bagworms, European pine shoot moth, pine tip moth, Zimmerman pine moth	20 mL	2 L	2	14
	Remarks: For pine shoot moths apply early in the spring and again in mid-June, thoroughly wetting branch tips.				
Sitka Spruce (seed tree)	Sitka-spruce weevils	20.8 L per 1000 L water		2	10
	Remarks: Maximum rate 20.8 L 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). Maximum of two applications per year.			
Spruce (seed tree and woodland use)	Seed and cone insects	10.4-20.8 L per 1000 L water	2 (10.4 L) 1 (20.8 L)	10 NA
	Remarks: Maximum rate 20.8 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. Maximum of one application per year.			

CAUTION: Forest Pest Control - birds and other wildlife in treated areas may be harmed.

RESTRICTED USES - FORESTRY USE

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. NATURE OF RESTRICTION: This product is to be used only in the manner authorized; consult local pesticide regulatory authorities about use permits which may be required.
CAUTION: Forest Pest Control - birds and other wildlife in treated area may be harmed.

RESTRICTED USE - AERIAL APPLICATION

TREE	PESTS CONTROLLED	COMMENTS	MAXIMUM # APPLICATIONS PER YEAR
Hemlock, Spruce, Balsam fir	Mites, Scales, Spruce needle miners, Spruce budworms	For aircraft application use 1.5 L of CYGON 480 EC SYSTEMIC INSECTICIDE in 5-20 L of water/ha, applied as a uniform spray of fine droplets. Application should be made as soon as the larvae hatch.	1

RESTRICTED ENTRY INTERVALS:

Crops	Activity	**REI** (days)
Filberts (hazelnuts)	Thinning	34
	Hand harvesting, hand-line irrigation	21
	All other activities	5
Peaches	Thinning	32
	Hand harvesting, hand-line irrigation	20
	All other activities	3
Pears	Thinning	28
	Hand harvesting, hand-line irrigation	17
	All other activities	1
Cherries	Thinning	20
	Hand harvesting, hand-line irrigation	9
	All other activities	12 hrs
Blueberries	Hand harvesting (high bush)	12
	Hand harvesting (low bush) and all other activities	12 hrs
Boxwood	Thinning	7
	All other activities	12 hrs
Hemlock, spruce, Balsam fir	Thinning	13
	All other activities	12 hrs
Christmas trees (Balsam fir, spruce, hemlock, pine), pine, oak, cedar	Thinning	18
	Hand-line Irrigation	3
	All other activities	12 hrs
Douglas-fir (seed tree)	Seed cone harvesting	48
	Scouting	5
	Grading, animal control, baiting	1
Sitka spruce (seed tree), spruce (seed tree and woodland)	Seed cone harvesting	49
	Scouting	5
	Hand pruning, staking, tying	27
	Grading, animal control, baiting	2
Lilac	All activities	15
Holly	All activities	12
Day lilies, irises	All activities	7
Broccoli, cauliflower	All activities	5
Bok choi (pak choi), chicory, Chinese broccoli	All activities	4
Leaf vegetables (beets and beet greens, turnip greens, kale, leaf lettuce, celery)	All activities	3
Azaleas, camellias, gerberas, gladioli, poinsettias, roses, brussel sprouts, strawberries	All activities	2
Larch	All activities	1
All other crops, soil drench or injection and chemigation application	All activities	12 hours