CYGON® 480

SYSTEMIC INSECTICIDE

Emulsifiable Concentrate Contains Dimethoate

A Systemic Insecticide for the control of:

- insects on listed flowering plants, ornamental shrubs and trees
- insects on listed vegetable, fruit and field crops

A Contact Insecticide for the control of houseflies

AGRICULTURAL

Registration No. 11022 Pest Control Products Act

GUARANTEE:

Dimethoate...480g\L (43.5%w\w)

WARNING POISON

READ THE LABEL BEFORE USING

BARTLETT

N.M. BARTLETT INC. 4509 BARTLETT ROAD BEAMSVILLE, ONTARIO LOR 1B1

* CYGON is a registered trademark of CYANAMID CANADA INC.

GENERAL USES AND METHODS OF APPLICATION

CYGON 480 is generally effective in controlling aphids, grasshoppers, houseflies, leafhoppers, leaf

miners, mites, scales, tarnished plant bugs and thrips.

BEFORE USING ANY PESTICIDE

STOP

READ THE LABEL

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN.

May be harmful of fatal if swallowed, inhaled or absorbed through the skin. Concentrate material may cause eye irritation. Avoid breathing vapors or spray mist. Use only in adequately ventilated areas. Avoid contact with skin, eyes and clothing. Wash thoroughly after using and before eating, drinking or smoking. 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 in dwellings. Do not use, pour, spill or store near heat or open flame. Do not mix with whitewash or apply within 2 weeks of whitewashing.

FIRST AID:

If on skin, wash thoroughly with soap and water.

If in eyes flush eyes with plenty of water for 15 minutes, then seek medical attention or contact a poison control centre.

If swallowed, drink one or two glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Get medical attention or contact a poison control centre.

TOXICOLOGICAL INFORMATION:

Symptoms of poisoning include nausea, vomiting, pinpoint pupils, excessive salivation, muscle twitching, convulsions and coma. This product, upon repeated or prolonged use, may cause cholinesterase inhibition.

ATROPINE IS ANTIDOTAL:

Give 1 to 2 mg of atropine sulphate intramuscularly or intravenously immediately and every 15 to 30 minutes until full atropinization has been attained. Pralidoxime chloride (2-PAM: PROTOPAM chloride) may be effective as an adjunct to atropine. Use according to label directions.

DISPOSAL:

Rinse the emptied container thoroughly and add the rinsings to the spray mixture in the tank. Follow provincial instructions for any required additional cleaning of the container prior to its disposal. Make the empty container unsuitable for further use. Dispose of the container in accordance with provincial requirements. For information on the disposal of unused, unwanted product and the cleanup of spills, contact the Provincial Regulatory Agency or the Manufacturer.

Drain the container completely into the spray tank. Then rinse the container at least 3 times, filling at least one-quarter full of water each time and draining into the spray tank after each rinse. Crush or break the empty container and bury it with at least 0.5 m of cover and away from water supplies.

DECONTAMINATION:

If accidental spillage of CYGON 480 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.

IN CASE OF AN EMERGENCY endangering life or property involving this product call collect day or night, 1-416-356-8310.

DIRECTIONS:

HOUSEFLY CONTROL: CYGON 480 controls houseflies for up to 6 weeks. Use a spray solution containing 25 mL of CYGON 480 per litre of water. Repeat applications should be made when necessary. Good sanitation is an essential part of any effective fly control program.

In dairy barns, hog pens, calf barns, poultry houses and other farms buildings: Apply a residual spray to the ceilings, walls, stanchions. Thoroughly wet all fly resting areas to the point of run-off, 5-6 litres of spray will cover 100 m2 of surface. For localized fly control apply spot sprays with a knapsack or similar type sprayer to doorways, around windows, counters and other areas frequented by flies.

General outdoor use:

To control houseflies around homes, recreation areas, garbage cans, animal quarters, food processing plants, warehouses, loading docks and refuse areas, spray exposed surfaces such as walls, fences, refuse containers and garbage. Exposure of sprayed areas to weather, particularly sunshine, reduces the duration of residual effects. Repeat applications as necessary.

VEGETABLE, FIELD AND FRUIT CROPS, FLOWERING PLANTS, ORNAMENTAL SHRUBS AND TREES

- 1. Do not apply foliar sprays during the heat of the day or when temperatures are exceedingly high.
- 2. Highly toxic to birds, bees and other wildlife. Do not treat when bees are foraging. Do not

apply to crops such as alfalfa when in full bloom.

- 3. CYGON 480 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.
- 4. 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 overspray.
- 5. 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.
- 6. DO NOT USE on ornamental plants not listed. While CYGON 480 may not always cause injury to species not listed, injury may occur to individual plants or in local areas.
- 7. 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 of four days will usually indicate if plant damage will result.
- 8. 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.

- 9. There has been no report of damage by CYGON 480 to any of the common evergreen species grown in Canada provided recommended rates have been followed.
- 10. Forest Pest Control birds and other wildlife in treated areas may be harmed.

VEGETABLES

For each of the vegetable crops, apply the CYGON 480 in sufficient water for good coverage. Repeat applications as necessary, except that label directions concerning required interval before harvest must be observed.

VEGETABLE CROPS	INSECTS CONTROLLED	RATE OF CYGON® 480 PER			
	CROPS		Hect- are	REMARKS	
Beans	Aphids, bean beetles, leafhoppers, leaf miners, lygus bugs , mites, tarnished plant bugs	7-10 mL	0.7-1 L	Do not feed or allow livestock to graze treated forage. Do not apply within 7 days of harvest.	
Cole Crops: Broccoli Brussels sprouts Cabbage Cauliflower	Aphids	7-10 mL	0.7-1 L	Required interval before harvest: Brussels sprouts 21 days Broccoli, cabbage, cauliflower, 4 days	
Leafy Vegetables: Beet greens Kale Lettuce Spinach Swiss chard Turnip Greens	Aphids leafhoppers	7 mL	700 mL	Required interval before harvest: Beet greens - 12 days Kale, lettuce, spinach, Swiss chard, turnip greens - 7 days	
Peas	Aphids	2.5-4 mL	275- 425 mL	May be applied by air or ground equipment. Do not feed or allow livestock to graze treated vines within 21 days after application. Do not apply within 3 days of harvest.	
Peppers	Aphids maggots	7-10 mL	0.7-1 L	Do not apply within 3 days of harvest.	
Potatoes Tomatoes	Aphids leafhoppers	5-10 mL	0.55- 1.1 L	Consult local agricultural authorities for proper timing. Do not apply within 7 days of harvest.	

Mushroom houses	Sciarid flies phorid flies	120 mL CYGON 480 in 10 L water	Spray all inside walls and paint the bed boards on the outside with the mixture. Apply after filling the beds with manure, but before spawning and casing. Do not spray on the manure.
FIELD CROPS		RATE OF CYGON 480 per	
Alfalfa Forage crops Pastures Waste areas	Aphids, young grasshoppers, leafhoppers, lygus bugs, plant bugs, reduction of alfalfa weevil larvae Adult or winged grasshoppers Sweet clover weevil	425 mL 850 mL 0.85-1.1 L	Use sufficient water for good coverage, using ground or aerial application equipment. Repeat only when necessary. Remove cattle before spraying. Do not apply during bloom. Do not graze or harvest for forage within the following times after application: Rate of Required CYGON Interval 480 per ha 425 mL 48 hours 850 mL 7 days 0.85- 28 days
Alfalfa	Alfalfa blotch leaf miners	550 mL	1.1 L Apply once in sufficient water for good coverage (use in a minimum of 200 litres of water per hectare.) Do not harvest or graze within two days of application.

Wheat Oats Barley	Thrips		1	L	su go 11 Ap litr D(wit	ound application: Use fficient water to obtain od coverage (usually 0-275 litres). Aerial plication: Use 25-50 es water per hectare. O NOT graze or harvest thin 21 days of last plication.
Rape	Aphids leafhoppers grasshoppers		850-90	00 mL	se WI eq mi ae 11 he oil on	e sufficient water to cure good coverage. nen using ground uipment use a nimum of 45 L/ha. For rial application apply in -17 litres of water per ctare. Do not apply in . Repeat applications ly when necessary and not treat within 30 days harvest.
	RATE OF CYGON* 480 PER:					
FRUIT CROPS	INSECTS CONTROLLED	10 litres water	1000 litres water	hecta	ire	REMARKS

Apples Pears	Aphids, mites, apple maggots pear psylla	15 mL	1-1.25 L oz.		Apply when insects first appear, using sufficient water for
					good coverage. Repeat as necessary. For apple maggot, spray when adult flies first appear (usually July 10 to 15) and repeat after 10 to 14 days. Required interval before harvest14 days.
	Tarnished plant bugs	7 mL	625 mL		On apple, apply at pink and first cover, using about 4000 L per hectare. On pears, apply at pre-bloom. Required interval before harvest14 days.
Peaches (bearing non-bearing)	Tarnished plant bugs	5 mL	500 mL	1.7 L	Apply first spray at pink stage and repeat at shuck fall. Do not apply within 70 days of harvest.Spray
	Aphids, Mites	10-15 mL	1-1.5 L		when insects first appear and repeat at monthly intervals or as necessary using sufficient water for good coverage.
Strawberries	Tarnished plant bugs, aphids, mites	15 mL	1.25 L	2.75 L	Apply first spray when first blooms appear and the second application 10 to 12 days later.
Strawberries (non-bearing)	Aphids, Mites	10 mL	1 L	2.25 L	Spray when insects first appear and repeat at monthly intervals or as necessary using sufficient water for good coverage.

Cherries (sweet and sour)	Black and western cherry fruit fly maggots	7 mL		625 mL	4.25 mL	Apply 5 days after the first adult fly has been trapped and repeat in 16 days if required. Do not spray within 15 days of harvest.	
	low are foliar sprays d. (outdoor plants or			RAT	TE OF CY	GON 480 PER:	
FLOWERING PLANTS	INSECTS CONTROLLED			10 litres w	ater	1000 litres water	
Azaleas	Lace bugs, leaf n mites, white flies	niners,	10	mL		1 L	
Camellias	Aphids, mites, ca scale	camellia		10 mL		1 L	
				ar followed by owth begins in il drench: Ap bund the base 60 mL in 10 li	y annual ap the spring ply CYGO of plants tres of wat	ays 6 weeks apart the first oplications soon after first g. N 480 as a soil drench in early spring at the rate er per plant up to 2 rate proportionately for	
Carnations	Aphids, thrips, mites		10	mL			
				5 mL per 100	m ³ bed o cient water	bil drench at the rate of r bench (14 litres per for even distribution. application.	
Day lilies	Aphids, thrips		20	mL		2 L	
Euonymus	Aphids, scale		20	mL		2 L	
Gardenias	White flies		10	mL		1 L	
Gerberas	Thrips		10	mL		1 L	
Gladiolus	Aphids, thrips		10	mL		1 L	

Iris	Aphids, Iris borer, thrips	20 mL	2 L
		For borer control spray when new leaves are 12-18 cm tall.	
Poinsettias (Outdoor plants)	Aphids, white flies, mites, mealy bugs	10 mL	1 L
Roses	Aphids, leaf hoppers,	10 mL	1 L
	mites, thrips	Apply thoroughly every 4 v season.	veeks during growing
	ow are foliar sprays unless l. (outdoor plants only)	RATE OF CY	GON 480 PER:
ORNAMENTAL SHRUBS, TREES (outdoor plants only)	INSECTS CONTROLLED	10 litres water	1000 litres water
Arborvitae	Aphids, bagworms, mites	20 mL	2 L
Birch	Aphids, leaf miners	5 mL	500 mL
Birch	Aphids, leaf miners	Foliar spray: For leaf mine expanded (about mid-May June. Soil drench: For full-sease may be used as a soil dre when the leaves start to op undiluted at a rate of 11 m diameter (cumulative total small shallow holes made within the dripline of the tre holes with earth. Drench immediately so as to satu soil drench treatment in M birch leaf miners for the co make more than one soil of season. Soil drenches ma newly-transplanted birche not well established. Som	ers apply when leaves are by; repeat the last week in on control CYGON 480 nch once in early May ben. Apply CYGON 480 nL per cm of stem basal of all stems) evenly into with a sharp instrument ee or clump. Close the thoroughly with water rate the root system. One ay should give control of omplete season. DO NOT drench treatment per ay not be effective on s where the root system is he hybrid varieties e.g. by be damaged by GON. Therefore, apply no

Boxwood	Mites leaf miners mealy bugs	10 mL	1 L	
		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	
	lear miners	For leaf miners apply in ea	arly May or late August.	
Douglas Fir Seed Tree	Cone insects (cone or gall midges, cone moths, seed chalcids, scale midges)			
Holly (English	Mites	10 mL	1 L	
American)	soft scale leaf miners	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, mites	20 mL	2 L	
Lilac (Syringa	Leaf miners	15 mL	1.25 L	
spp.)		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.		
Oak	Golden oak scale	20 mL	2 L	
Pine (Mugho, Red, Scots)	Red and black-headed pine sawfly larvae	10 mL	1 L	
	Aphids, bagworms, European pine shoot moths, Nantucket pine tip moths, Zimmerman pine moths	20 mL	2 L	
		For pine shoot moths apply early in the spring and again in mid-June, thoroughly wetting branch tips.		
Sitka Spruce	Sitka-spruce weevil	2.5 L in 100 litres water Thoroughly spray the terminal growth to the point of run-off at the time of egg laying (usually during the first half of May).		

Taxus	Mites, Fletcher scale,	20 mL	2 L
	mealy bugs	For Fletcher scale spray a again 10 days later when	

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 a control product under unsafe conditions.

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.

RESTRICTED USE

AERIAL APPLICATION

TREE	INSECTS CONTROLLED	RATE OF CYGON 480 PER		
		10 Litres WATER	1000 Litres WATER	
Hemlock	Mites, scales, spruce	10 mL	1 L	
	needle miners	For aircraft application use 1.5 L 5-20 litres water per hectare, app uniform spray of fine droplets. A be made as soon as the larvae h	lied as an oplication should	

This label transcript service is offered by the Pest Management Regulatory Agency to provide efficient searching for label information. This service and this information do not replace the official hard-copy label. The PMRA does not provide any guarantee or assurance that the information obtained through this service is accurate, current or correct, and is therefore not liable for any loss resulting, directly or indirectly, from reliance upon this service.

+))