DIMETHOATE 480

SYSTEMIC INSECTICIDE

emulsifiable concentrate

contains dimethoate

A Systemic Insecticide for the control of
- Insects on listed flowering plants, ornamental shrubs & trees
- Insects on listed vegetables, ruits and field crops

A Contact and Residual Insecticide for the Control of houseflies

COMMERCIAL

GUARANTEE:

dimethoate480 g/L

REGISTRATION NO. 14767
PEST CONTROL PRODUCTS ACT

READ THE LABEL AND THIS PAMPHLET BEFORE USING

WARNING

POISON

WILBUR-ELLIS COMPANY OF CANADA LIMITED 555 Southgate Drive, Unit 101 Guelph, Ontario N2H 6J3

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN.

May be harmful or fatal if swallowed, inhaled or absorbed through the skin. Concentrate material may cause eye irritation.

Avoid breathing vapours or spray mist.

Use only in adequately ventilated areas.

Avoid contact with skin, eyes or 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 mix with whitewash or apply within 2 weeks of whitewashing.

FIRST AID:

CALL A PHYSICIAN AT ONCE IN ALL CASES OF SUSPECTED POISONING.

If on skin, wash thoroughly with soap and water.

If in eyes, flush eyes with plenty of water for 15 minutes; seek medical attention.

If swallowed, drink one to 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 call 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.

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 are necessary on plain wood surfaces.

DISPOSAL:

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

WILDLIFE STATEMENT:

- 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.

STORAGE PRECAUTIONS:

- 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.

HOUSEFLY CONTROL

DIMETHOATE 480 controls houseflies for up to 6 weeks. Use a spray solution containing 200-250 mL DIMETHOATE 480 per 10 litres of water. Repeat applications should be made when necessary. Good sanitation is an essential part of any effective fly control program. DO NOT use in homes.

In dairy barns, hogpens, calf barns, poultry houses and other farm buildings:

Apply a residual spray to the ceilings, walls, stanchions. Thoroughly wet all fly resting areas to the point of runoff. Five (5) to ten (10) litres of spray will cover 100 mÿ 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 wells, 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. DIMETHOATE 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 neitherpredictable 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 overspray.

- 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.
- 4. DO NOT USE on ornamental plants not listed. While DIMETHOATE 480 may not always cause injury to species not listed, injury 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 Moraine Honeylocust

- 7. There has been no report of damage by DIMETHOATE 480 to any of the common evergreen species grown in Canada provided recommended rates have been followed.
- 8. Forest Pest Control-birds and other wildlife in treated areas may be harmed.
- 9. Do not apply foliar sprays during the heat of the day or when temperatures are exceedingly high.

VEGETABLE	INSECTS	RATE OF DIMETHOATE 480 PER	
CROPS	CONTROLLED	10 litres water	Hectare
Asparagus	Asparagus aphid	35 mL	2.3L

REMARKS: Ground Application: For mature asparagus, sprays should begin July 1 after crop has been harvested, and continue at three (3) to four (4) week intervals until defoliation in October. For immature asparagus, begin application mid-May. Apply by boom or field sprayer using 675 L of water per hectare.

	Aphids, bean beetles, leafhoppers, leafminers, lygus bugs, mites, tarnished plant bugs	7-10 mL	0.7-1 L
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REMARKS: 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		
Bruss	interval before harv els sprouts - 21 day oli, Cabbage, Caulif	S			
Leafy Vegetables: Beet greens, Kale, Lettuce, Spinach, Swiss Chard, Turnip Greens	Aphids, leafhoppers	7 mL	700 mL		
Beet Kale	REMARKS: Required interval before harvest: Beet greens - 12 days Kale, Lettuce, Spinach - 7 days Swiss chard, Turnip greens - 7 days				
Peas	Aphids	2.5-4 mL	275-425 mL		
Do not feed or allo	plied by air or grou w livestock to graze t apply within 3 day	treated vines	within 21 days after		
Peppers	Aphids, maggots	7-10 mL	0.7-1L		
REMARKS: Do not ap	ply within 3 days of	harvest.			
Potatoes, Tomatoes (field)	Aphids, leafhoppers	5-10 mL	0.55-1.1 L		
REMARKS: Consult local agricultural authorities for proper timing. Do not apply within 7 days of harvest.					
Mushroom houses	Sciarid flies, Phorid flies.	120 mL			
REMARKS: 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 or compost.					

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

FIELD CROPS	INSECTS CONTROLLED	RATE OF DIMETHOATE 480 INSECTICIDE/HA			
Alfalfa	Aphids, leafhoppers, reduction of alfalfa weevil larvae.	425 mL			
Alfalfa (seed production)	Blotch leafminers. Grasshoppers - nymphs Grasshoppers - adults Lygus bugs, plant bugs	550 mL 550 mL 850-900 mL 1.1 L			
	REMARKS ++				
Do not graze or har	vest for forage within 2 day	s after application.			
or harvest for fora- Do not graze or har Do not graze or har	Use a water volume of at least 200 L/ha with ground equipment. Donot graze or harvest for forage within 2 days after treatment. Do not graze or harvest for forage within 2 days after treatment. Do not graze or harvest for forage within 28 days after treatment. Do not graze or harvest for forage within 28 days after treatment.				
Canola (rape) Aphids, leafhoppers, grasshoppers		850-900 mL			
Repeat application days of harvest.	only when necessary and do n	oot treat within 21			
Forage crops grain	Grasshoppers - low infestations	425 mL-550 mL			
	- nymphs - adults	550 mL 850-1 L			
Use higher rate on Do not graze or har	grain. vest for forage within 2 day	rs after treatment.			
	vest for forage within 2 day vest for forage within 28 da				
Sweet clover	Sweet clover weevil	0.850-1.1L			
Do not graze or har	vest for forage within 28 da	ys after treatment.			
Pastures Wastelands					
Use high rate for a	Do not graze or harvest for forage within 2 days after treatment. Use high rate for adult grasshopper control on wasteland. Do not graze or harvest for forage within 28 days after treatment.				

Wheat	Orange blossom Wheat midge	If midge population persists at 3 days apply a second treatment. Use a water volume of at least 100 L/ha by air. Higher volume will provide more thorough coverage.
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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 $15\cupec$ C and the wind speed is less than $10\cupec$ kPh. High volume sprays will improve penetration of the crop. Proper timing of application is essential for control.

DO NOT harvest within 21 days of application.

DO NOT apply to areas where bees are actively foraging or near apiaries as product is toxic to bees.

DO NOT graze or use for forage within 7 days of application. Consult provincial authorities for further information concerning rates and time of application.

Wheat, Oats	Thrips	1L
Barley		

Ground application: Use sufficient water to obtain good coverage, (usually 110-275 litres)/ha. Same limitations for harvesting and grazing as above.

++NOTE: Use sufficient water for good coverage when utilizing ground or aerial application equipment. This formulation is not suited to application in oil.

RESTRICTIONS:

Remove cattle prior to spraying.

This product is toxic to bees.

When spraying honey-producing crops (alfalfa, red clover, sweet clover and alsike) spray at least 5 days before bloom appears and do not introduce hives until full bloom. Hives should be removed from vicinity

before making spray applications. If spraying must be done during the blooming period, restrict application to the period after dark or very early morning in order to reduce mortality to bees that may be visiting the blooms.

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		RATE OF DIMET	HOATE 480 PE	R
FRUIT CROPS	INSECTS CONTROLLED	10 LITRES WATER	1000 LITRES WATER	HECTARE
Apples	Codling moth		500-600 mL	
	REMARK	S		
	noth control make two (2) approx γ and August). Required inte			
Apples	Aphids, mites apple maggots	10-12.5 mL	1-1.25 L	
Pears	pear psyllas. Tarnished plant bugs	6.25 mL	625 mL	
(usually July Apples: Appl	Repeat as necessary. For apple maggot, spray when adult flies first appear (usually July 10-15) and repeat after 10 to 14 days. Apples: Apply at pink and first cover, using about 4000 L/ha. Pears: Apply at pre-bloom.			
Blueberry (Lowbush)	Blueberry maggot			580-830 mL
Apply pesticide in sufficient water for good coverage, one week after first berries ripen. Use no more than 1000 L spray/ha. Date of first spray should usually occur between July 5 and 15 depending on area and season.				
Apply second spray in 10-12 days if needed.				
Required interval between last spray and harvest - 15 days.				
Peaches	Tarnished plant bugs,	5 mL	500 mL	1.7 L
(non- bearing)	Aphids, mites	10-15 mL	1.15 ь	
Spray when insects first appear and repeat 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 fairly good.

Strawberries (bearing)	Tarnished plant bugs	12.5 mL	1.25 L	2.75 L	
	spray when blooms appear and needed. Do not spray with:			to 12	
Strawberries (non-bearing)	Aphids, mites	10 mL	1 L	2.25 L	
	Spray when insects first appear and repeat as necessary using sufficient water for good coverage. Do not spray within 7 days of harvest.				
Sweet Cherries	Black and Western Cherry 5 mL 500 mL 2.25 L fruit fly maggots				
Apply once or	Apply no later than 6 days after the first adult fly has been trapped. Apply once only. Do not spray within 21 days of harvest.				
Sour Black and Western cherry 5 mL 500 mL 2.25 L fruit fly maggots.					
Apply no later than 6 days after the first adult fly has been trapped and repeat in 14 days if required. Do not spray within 21 days of harvest.					

The uses below are foliar sprays unless otherwise indicated: (outdoor plants only).

	FLOWERING INSECTS PLANTS CONTROLLED	RATE OF DIMETHOATE 480 PER		
PLANTS		10 LITRES OF WATER	1000 LITRES OF WATER	
Azaleas	Lace bugs, leaf miners, mites, white flies	10 mL	1 L	
Camelias	Aphids, mites	10 mL	1 L	

camelia scales

		Foliar spray: sprays 6 weeks the first year subsequent yea application so growth begins Soil Drench: DIMETHOATE 480 drench around ofplants in ea the rate of 60 litres of wate to 2 metres ta this rate prop for larger pla	apart during . In rs make an on after first in the spring. Apply as a soil the base rly spring at mL in 10 r per plant up ll. Increase ortionately	
Carnations	Aphids, thrips,	10 mL	1 L	
	mites	Soil drench: Apply as a soil drench at the rate of 125 mL per 100 mÿ bed or bench (12.5 L/ha) in sufficient water for even distribution. Water in thoroughly after application.		
Day lilies Euonymus Gardenias Gerberas Gladioli Irises	Aphids, thrips Aphids, scales White flies Thrips Aphids, thrips Aphids, iris borer,	20 mL 20 mL 10 mL 10 mL 10 mL 20 mL	2 L 2 L 1 L 1 L 2 L	
	thrips	For borer cont when new leave tall.	, + +	
Poinsettias (outdoor plants)	Aphids, white flies, mites, mealy bugs	10 mL	1L	
Roses	Aphids,	10 mL	1 L	
	leafhoppers, mites, thrips		Apply thoroughly every 4 weeks during growing season.	

ORNAMENTAL INSECTS RATE OF DIMETHOATE 480 SHRUBS CONTROLLED		OATE 480 PER	
TREES (outdoor plants only)		10 LITRES OF WATER	1000 LITRES OF WATER
Arborvitae	Aphids, bagworms, mites	20 mL	2 L
Birch	Aphids, leaf miners	5 mL	500 mL
	MITTELS	when leaves ar repeat the las Soil drench:	
		Soil drench: For full-season control DIMETHOATE 480 may be used as a soil drench once in early May when the leaves start to open. Apply DIMETHOATE 480 undiluted at a rate of 11 mL 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 leaf miners 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 amount of DIMETHOATE. Therefore, apply no more than the	
Boxwood	Mites, leaf miners, mealy bugs	10 mL	1 L
	miners, meary bugs	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
		For leaf miners apply in early May or late August.	

Douglas Fir (seed tree)	Cone insects (cone or gall midges,100 L water cone moths, seed chalcids, scale midges)	are at or near Complete cover foliage in the	2.5 L per Apply as a wetting spray ould be made when cones the pendant stage. age of the cones and cone-bearing area of the ant for satisfactory	
Holly (English,	Mites, soft scales leaf needle miners	10 mL	1 L	
(American)	(American) For leaf miners leaf miner flies		s apply in spring when es first appear or in or control of larvae in eaves.	
Juniper	Aphids, bagworms, midges, mites	20 mL	2 L	
Lilac	Leaf miners	15 mL	1.25 L	
(Syringa 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 Scales	20 mL	2 L	
Pine (Mugho, Red, Scots)	Red and blackheaded pine sawfly larvae Aphids, bagworms European pine shoot moths, Nantucket pine tip moths. Zimmerman pine moths	10 mL 20 mL	1 L 2 L	
		For pine shoot moths apply early in the spring and again in mid-June, thoroughly wetting branch tips.		
Spruce (woodland	Seed and cone insects	104-208 mL	10.4-20.8 L	

use)

		Thoroughly spray cone-bearing portions of tree to point of runoff using ground hydraulic spray equipment when strobili are closed and turning but before they reach the horizontal position. Contact your local forest pest control officer for more information on timing and spray application as well as spruce species that may be treated.	
Sitka Spruce	Sitka spruce weevil	250 mL	25 L
		Thoroughly spray the terminal growth to the point of runoff at the time of egg laying (usually during the first half of May).	
Taxus	Mites, Fletcher scale, mealy bugs	20 mL	2 L
		For Fletcher scale, spray at the end of June and again 10 days later when crawlers are moving.	

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.

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RESTRICTED USE AERIAL APPLICATION					
TREE	INSECTS CONTROLLED	RATE OF DIMETHOATE 480 PER			
		10 LITRES OF WATER	1000 LITRES OF WATER		
Hemlock	Mites, scales spruce needle miners	10 mL	1 L		
		For aircraft applications use 1.5 L DIMETHOATE 480 in 5-20 litres water per hectare. applied as a uniform spray of fine droplets. Application should be made as soon as the larvae hatch.			

DIMETHOATE 480

SYSTEMIC INSECTICIDE

EMULSIFIABLE CONCENTRATE

CONTAINS DIMETHOATE

COMMERCIAL

GUARANTEE:

REGISTRATION NO. 14767
PEST CONTROL PRODUCTS ACT

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WARNING

POISON

NET CONTENTS 10 LITRES

WILBUR-ELLIS COMPANY OF CANADA LIMITED 555 Southgate Drive, Unit 101 Guelph, Ontario N2H 6J3

DIMETHOATE 480 can be used to control:

Aphids, mites and tarnished plant bugs on apples, pears, peaches and strawberries.

Apple maggots on apples.

Pear psylla on pears.

Fruit fly maggots on cherries.

Aphids and leafhoppers on beans, leafy vegetables, potatoes and tomatoes. Aphids on cole crops, peas and peppers.

Bean beetles, leaf miners, mites and tarnished plant bugs on beans.

Aphids and grasshoppers on certain field crops.

Various insects on outdoor flowering plants, ornamentals shrubs and trees. Housefly control.

FOR RATES AND TIMES OF APPLICATION, READ THE ATTACHED PAMPHLET.

PRECAUTIONS: KEEP OUT F REACH OF CHILDREN. May be harmful or fatal if swallowed, inhaled or absorbed through the skin. Concentrate material may cause eye irritation. Avoid breathing vapours or spray mist. Use only in adequately ventilated areas. Avoid contact with skin, eyes or 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. Keep out of direct sunlight.

Do not apply foliar sprays during the heat of the day or when temperatures are exceedingly high. Highly toxic to birds, bees and other other wildlife. Do not treat when bees are foraging. Do not apply to crops such as alfalfa when in full bloom.

FIRST AID: If on skin, wash thoroughly with soap and water. If in eyes, flush eyes with plenty of water for 15 minutes; seek medical attention. If swallowed, drink one to 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 call poison control centre.

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DISPOSAL:

- 1. Rinse the emptied container thoroughly and add the rinsings to the spray mixture in the tank.
- 2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
- 3. Make the empty container unsuitable for further use.
- 4. Dispose of the container in accordance with provincial requirements.
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NOTICE TO BUYER: Seller's guarantee shall be limited to the terms set out on the label and subject thereto. The buyer assumes the risk to persons or property arising from the use or handling of this product and accepts the product on that condition.

SHIP AND STORE BETWEEN 4 AND 30'C.

DIMETHOATE 480 11/93

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.

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