

booklet label

GROUP 23 INSECTICIDE

OberonTM Flowable Insecticide-Miticide

For control of mites and whiteflies on field, vegetable and fruit crops

COMMERCIAL

SUSPENSION

ACTIVE INGREDIENT: Spiromesifen 240 g/L

Contains 1,2 benzisothiazolin-3-one at 0.04%, 5-chloro-2-methyl-4-isothiazolin-3-one at 0.001% and 2-methyl-4-isothiazolin-3-one at 0.0004% as preservatives.

REGISTRATION NO. 28905 PEST CONTROL PRODUCTS ACT



POISON

EYE IRRITANT

READ THE LABEL AND THIS LEAFLET BEFORE USING

NET CONTENTS: 1 L to 1000 L

Bayer CropScience Inc.*
Suite 200, 160 Quarry Park Blvd. S.E.
Calgary, Alberta T2C 3G3
Product Information: 1-888-283-6847
www.cropscience.bayer.ca

In case of spills, poisoning or fire, telephone emergency response number 1-800-334-7577 (24 hours a day).

Table of Contents:	Section Number
GENERAL INFORMATION	Notices1
	The Product
SAFETY AND HANDLING	Precautions, Protective Clothing and Equipment3
	First Aid and Toxicological Information4
	Environmental Precautions5
	Storage6
	Disposal7
DIRECTIONS FOR USE	Crops and Pests8
	Application Instructions and Use Limitations9
	Tank Mixes and Mixing Instructions10
	Rotational Crop Plant-back Intervals11
	Pre-harvest Intervals12
	Restricted Entry Interval
	Resistance Management Recommendations14

GENERAL INFORMATION

Section 1: Notices

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.

Section 2: The Product

OberonTM Flowable Insecticide-Miticide is for control of listed mites and whiteflies in outdoor field crops, vegetables and fruit.

OberonTM Flowable Insecticide-Miticide is a Suspension Concentrate formulation. The active ingredient contained in OberonTM Flowable Insecticide-Miticide is active by contact on all mite development stages. However, mite juvenile stages are often more susceptible than adults.

OberonTM Flowable Insecticide-Miticide is also effective against whitefly nymphs, plus it has an effect on the pupal stage. Application should be timed to coincide with early threshold levels in developing mite and whitefly populations.

OberonTM Flowable Insecticide-Miticide can be applied by air or ground equipment. However, thorough coverage of all plant parts is required for optimum performance. Performance evaluations should be made 4-10 days following application.

OberonTM Flowable Insecticide-Miticide has translaminar movement throughout the leaf surface, but to assure optimum effectiveness, the product should be applied to wet both the upper and lower surfaces of the leaf canopy.

Visit us at www.cropscience.bayer.ca or phone 1-888-283-6847 for information on recent additional registrations for OberonTM Flowable Insecticide-Miticide.

SAFETY AND HANDLING

Section 3: Precautions, Protective Clothing and Equipment

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN.

May be harmful if swallowed, inhaled, or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes, or clothing. Do not breathe vapour.

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.

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. In addition, wear protective eyewear (goggles or face shield) and a respirator with a NIOSH-approved organic-vapour-removing cartridge with a prefilter approved for pesticides, or a NIOSH-approved canister approved for pesticides during mixing and loading. In addition, wear chemical-resistant headgear during open cab airblast application. Chemical-resistant headgear includes Sou'Wester hat, chemical-resistant rain hat or large brimmed waterproof hat and hood with sufficient neck protection. Gloves are not required during application within a closed cab.

Vacate the area to be treated until the application is complete.

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

User Safety Recommendations:

User should:

- 1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- 2. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 3. Remove PPE immediately after handling this product.
- 4. Wash the outside of gloves before removing.
- 5. As soon as possible, wash thoroughly and change into clean clothing.

If this pest control product is to be used on a commodity that may be exported and you require information regarding Maximum Residue Limits for an importing country, please contact Bayer CropScience Canada Inc., at 1-888-283-6847 or www.cropscience.bayer.ca.

Section 4: First Aid and Toxicological Information

FIRST AID:

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

If swallowed	 Call a poison control centre or doctor immediately for treatment advice.
	 Do not induce vomiting unless told to do so by a poison control centre or doctor.
	 Do not give any liquid to the person. Do not give anything by mouth
	to an unconscious person.
If 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 on skin or	Take off contaminated clothing. Rinse skin immediately with plenty	
clothing	of water for 15-20 minutes.	
	 Call a poison control centre or doctor for treatment advice. 	
If inhaled	 Move person to fresh air. 	
	If person is not breathing, call 911 or an ambulance, then give	
	artificial respiration, preferably by mouth-to-mouth, if possible.	
	• Call a poison control centre or doctor for further treatment advice.	

TOXICOLOGICAL INFORMATION:

No specific antidote is available. Treat symptomatically. Product contains a petroleum distillate. Vomiting may cause aspiration pneumonia.

Section 5: Environmental Precautions

TOXIC to certain beneficial arthropods (which may include predatory and parasitic insects, spiders, and mites). Minimize spray drift to reduce harmful effects on beneficial arthropods in habitats next to the application site such as hedgerows and woodland.

To reduce runoff from treated areas into aquatic habitats, avoid application to areas with a moderate to steep slope, compacted soil, or clay. Avoid application when heavy rain is forecast. Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body.

May be toxic to bee brood. Bee brood may be exposed to residues on pollen and nectar brought back to the hive by bees foraging on flowering crops and weeds. To minimize potential exposure to bees, avoid application if bees are visiting the treatment area. Minimize spray drift to habitats close to the application site.

Section 6: Storage

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed.

Store in original container and out of the reach of children, preferably in a locked storage area. Store in a cool, dry place.

Do not store below freezing.

Section 7: Disposal

Recyclable Container:

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.

Disposal of Unused, Unwanted Product: 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 cleanup of spills.

DIRECTIONS FOR USE

Section 8: Crops and Pests

FIELD CROPS, VEGETABLES AND FRUIT OUTDOORS

For all crops, apply specific dosage of OberonTM Flowable Insecticide-Miticide as needed for control. Good coverage of the foliage is necessary for optimal control. An adjuvant may be used to improve coverage and control. For best results the treatment should be made when whitefly or mite populations begin to build and before a damaging population becomes established. OberonTM Flowable Insecticide-Miticide is effective against the egg and nymphal stages of whiteflies and mites. Control should be directed at these stages. OberonTM Flowable Insecticide-Miticide will not knock down adult whitefly populations. Rate range is provided and is generally dependent on size of the plant and density of the foliage. Apply in adequate water for uniform coverage with ground or aerial application equipment. Repeat applications at listed intervals if monitoring indicates the need.

TUBEROUS and CORM VEGETABLES (Crop Subgroup 1C):

Arracacha, arrowroot, Chinese artichoke, Jerusalem artichoke, edible canna, cassava bitter and sweet, chayote root, chufa, dasheen (taro), ginger, leren, potato, sweet potato, tanier, turmeric, yam bean, yam true.

	•	•
PESTS	DOSAGE	REMARKS
	(mL Oberon TM	
	Flowable Insecticide-	
	Miticide/ha)	
Two-spotted	500 - 600	Pre-harvest Interval (PHI): 7 days.
spider mite,		Maximum Oberon TM Flowable Insecticide-Miticide
Whiteflies		allowed per 7-day interval: 600 mL/ha.
(including		Maximum Oberon TM Flowable Insecticide-Miticide
silverleaf,		allowed per crop season: 1,200 mL/ha.
sweetpotato		Maximum number of applications per crop season: 2.
and		Minimum application volume: 100 L/ha – ground, 50
greenhouse)		L/ha – aerial application.

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than Bayer CropScience under the User Requested Minor Use Label Expansion program. For these uses, Bayer CropScience has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

GREEN ONIONS (Crop Subgroup 3-07B): Chinese chive (fresh leaves), Chive (fresh leaves), Elegans hosta, Fritillaria, Kurrat, Lady's leek, Leek, Beltsville bunching onion, Fresh onion, Green onion, Macrostem onion, Tree onion (tops), Welsh onion (tops), Shallot (fresh leaves), Wild leek.

Pests	DOSAGE (mL	Remarks
	Oberon TM Flowable	
	Insecticide-	
	Miticide/ha)	
Two-spotted		Pre-harvest Interval (PHI): 7 days.
spider mite	500 - 600	Maximum Oberon™ Flowable Insecticide-Miticide
		allowed per 7-day interval: 600 mL/ha.
		Maximum Oberon TM Flowable Insecticide-Miticide
		allowed per crop season: 1,800 mL/ha.
		Maximum number of applications per crop season: 3.
		Minimum application volume: 100 L/ha – ground
		application.

LEAFY VEGETABLES (Crop Group 4-13, except Bok choy Chinese cabbages, Broccoli raab, Collards, Kales, Mizuna, Mustard greens,):

Chinese amaranth, Amaranth, Arugula, Indian asters, Blackjack, Chinese broccoli, Abyssinian cabbages, Seakale cabbages, Cat's Whiskers, Cham-chwi, Cham-na-mul, Fresh chervil leaves, Chipilin, Garland chrysanthemum, Fresh cilantro leaves, Corn salad, Cosmos, Garden cress, Upland cress, Dandelion leaves, Dang-gwi, Fresh dillweed leaves, Dock, Dol-nam-mul, Ebolo, Endives, Escaroles, Fameflowers, Feather cockscombs, Good King Henry, Hanover salad, Huauzontles, Jute leaves, Bitter lettuce, Head lettuce, Leaf lettuce, Maca, Orach, Fresh parsley leaves, Common plantains, English primrose, Garden purslane, Winter purslane, Radicchio, Radish leaves, Rape leaves, Wild rocket, Shepherd's purse, Spinach, Malabar spinach, New Zealand spinach, Tree spinach, Swiss chard, Tanier spinach, Turnip greens, Chinese violets, Watercress, and cultivars, varieties and/or hybrids of these

PESTS	DOSAGE	REMARKS
	(mL Oberon TM	
	Flowable Insecticide-	
	Miticide/ha)	
Whiteflies	500 - 600	Pre-harvest Interval (PHI): 7 days.
(including		Maximum Oberon™ Flowable Insecticide-Miticide
silverleaf,		allowed per 7-day interval: 600 mL/ha.
sweetpotato		Maximum Oberon TM Flowable Insecticide-Miticide
and		allowed per crop season: 1,800 mL/ha.
greenhouse)		Maximum number of applications per crop season: 3.
		Minimum application volume: 100 L/ha – ground.

Broccoli, Brussels sprouts, cabbage, Chinese mustard cabbage (gai choy), cauliflower, cavalo broccoli.

broccon.		
PESTS	DOSAGE	REMARKS
	(mL Oberon TM	
	Flowable Insecticide-	
	Miticide/ha)	
Whiteflies	500 - 600	Pre-harvest Interval (PHI): 7 days.
(including		Maximum Oberon™ Flowable Insecticide-Miticide
silverleaf,		allowed per 7-day interval: 600 mL/ha.
sweetpotato		Maximum Oberon™ Flowable Insecticide-Miticide
and		allowed per crop season: 1,800 mL/ha.
greenhouse)		Maximum number of applications per crop season: 3.
		Minimum application volume: 100 L/ha – ground.

WOLL BAR		
KOHLRABI		
PESTS	DOSAGE	REMARKS
	(mL Oberon TM	
	Flowable Insecticide-	
	Miticide/ha)	
Whiteflies	500 - 600	Pre-harvest Interval (PHI): 7 days.
(including		Maximum Oberon TM Flowable Insecticide-Miticide
silverleaf,		allowed per 7-day interval: 600 mL/ha.
sweetpotato		Maximum Oberon™ Flowable Insecticide-Miticide
and		allowed per crop season: 1,800 mL/ha.
greenhouse)		Maximum number of applications per crop season: 3.
		Minimum application volume: 100 L/ha – ground.

LEAF PETIOLES VEGETABLES (Crop Subgroup 22B)			
Cardoon, celer	Cardoon, celery, Chinese celery, rhubarb, fuki, udo, and zuiki.		
PESTS	DOSAGE	REMARKS	
	(mL Oberon TM		
	Flowable Insecticide-		
	Miticide/ha)		
Whiteflies	500 - 600	Pre-harvest Interval (PHI): 7 days.	
(including		Maximum Oberon™ Flowable Insecticide-Miticide	
silverleaf,		allowed per 7-day interval: 600 mL/ha.	
sweetpotato		Maximum Oberon™ Flowable Insecticide-Miticide	
and		allowed per crop season: 1,800 mL/ha.	
greenhouse)		Maximum number of applications per crop season: 3.	
		Minimum application volume: 100 L/ha – ground.	

SUCCULENT SHELLED, EDIBLE-PODDED AND DRY SHELLED BEANS

Lupinus spp., includes grain lupin, sweet lupin, white lupin, and white sweet lupin; phaseolus spp., includes: field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean; Vigna spp., includes: adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean; broad bean (fava), chickpea (garbanzo bean), guar, jackbean, lablab bean (hyacinth bean), lentil, soybean (immature seed), sword bean.

PESTS	DOSAGE	REMARKS
	(mL Oberon™	
	Flowable Insecticide-	
	Miticide/ha)	
Broad mite,	500 - 600	Pre-harvest Intervals (PHI): Succulent and Edible-
Two-spotted		podded Beans – 1 day; Dry Shelled Beans – 10 days.
spider mite,		

Whiteflies	Maximum Oberon TM Flowable Insecticide-Miticide
(Including	allowed per 7-day interval: 600 mL/ha.
Silverleaf,	Maximum Oberon TM Flowable Insecticide-Miticide
Sweetpotato	allowed per crop season: 1,800 mL/ha.
and	Maximum number of applications per crop season: 3.
Greenhouse)	Minimum application volume: 100 L/ha – ground, 50
	L/ha – aerial application
	Forage from treated crops may be used for animal
	consumption.

DRY SHELLED PEAS

Pisum spp., includes dwarf pea, English pea, field pea, garden pea, green pea; chick pea/garbanzo bean; lentils; pigeon pea.

PESTS	DOSAGE	REMARKS
	(mL Oberon TM	
	Flowable Insecticide-	
	Miticide/ha)	
Broad mite,	500 - 600	Pre-harvest Interval (PHI): 10 days.
Two-spotted		Maximum Oberon™ Flowable Insecticide-Miticide
spider mite,		allowed per 7-day interval: 600 mL/ha.
Whiteflies		Maximum Oberon™ Flowable Insecticide-Miticide
(including		allowed per crop season: 1,800 mL/ha.
silverleaf,		Forage from treated crops may be used for animal
Sweetpotato		consumption.
and		Maximum number of applications per crop season: 3.
greenhouse)		Minimum application volume: 100 L/ha – ground, 50
		L/ha – aerial application.

FRUITING VEGETABLES: (Crop Subgroup 8-09)

African eggplant, bush tomato, cocona, currant tomato, eggplant, garden huckleberry, goji berry, groundcherry, martynia, naranjilla, okra, pea eggplant, pepino, bell pepper, nonbell pepper, roselle, scarlet eggplant, sunberry, tomatillo, tomato, tree tomato and cultivars, varieties and hybrids of these.

PESTS	DOSAGE	REMARKS
	(mL Oberon™	
	Flowable Insecticide-	
	Miticide/ha)	
Broad mite,	500 - 600	Pre-harvest Interval (PHI):1 day.
Two-spotted		Maximum Oberon™ Flowable Insecticide-Miticide
spider mite,		allowed per 7-day interval: 600 mL/ha.
Whiteflies		Maximum Oberon™ Flowable Insecticide-Miticide
(including		allowed per crop season: 1,800 mL/ha.
silverleaf,		Maximum number of applications per crop season: 3.
sweetpotato and		Minimum application volume: 100 L/ha – ground.
greenhouse)		

CUCURBIT VEGETABLES (Crop Group 9):

Balsam apple, balsam pear, bitter melon, chayote fruit, Chinese cucumber, Chinese waxgourd (Chinese preserving melon), citron melon, cucumber, edible gourds (includes Chinese okra, cucuzza, hechima, and hyotan), gherkin, muskmelon (includes cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon), pumpkin, summer squash (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, and zucchini), winter squash (includes acorn squash, butternut squash, calabaza, hubbard squash, and spaghetti squash), watermelon.

PESTS	DOSAGE	REMARKS		
	(mL Oberon™			
	Flowable Insecticide-			
	Miticide/ha)			
Two-spotted	500 - 600	Pre-harvest Interval (PHI): 1 days.		
spider mite,		Maximum Oberon TM Flowable Insecticide-Miticide		
Whiteflies		allowed per 7-day interval: 600 mL/ha.		
(including		Maximum Oberon TM Flowable Insecticide-Miticide		
silverleaf,		allowed per crop season: 1,800 mL/ha.		
sweet potato		Maximum number of applications per crop season: 3.		
and		Minimum application volume: 100 L/ha – ground.		
greenhouse)				

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than Bayer CropScience under the User Requested Minor Use Label Expansion program. For these uses, Bayer CropScience has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

CANEBERRIES (Crop Subgroup 13-07A):

Blackberry (including Andean blackberry, arctic blackberry, bingleberry, black satin berry, boysenberry, brombeere, California blackberry, Chesterberry, Cherokee blackberry, Cheyenne blackberry, common blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, evergreen blackberry, Himalayaberry, hullberry, lavacaberry, loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, mora, mures deronce, nectarberry, Northern dewberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, Southern dewberry, tayberry, youngberry, zarzamora); Loganberry (*Rubus loganobaccus*); Raspberry, black and red (*Rubus* spp.); Wild raspberry (*Rubus muelleri*); Cultivars, varieties and/or hybrids of these

Pests Dosage Remarks mL/ha Two-spotted Pre-harvest Interval (PHI): 3 days. Maximum OberonTM Flowable Insecticide-Miticide spider mite, 880 - 1.160**McDaniel** allowed per 7-day interval: 1,160 mL/ha. Maximum OberonTM Flowable Insecticide-Miticide spider mite allowed per crop season: 3,480 mL/ha. Maximum number of applications per crop season: 3. Minimum application volume: 100 L/ha – ground, 50 L/ha – aerial application.

LOW GROWING BERRY (Crop Subgroup 13-07G):

Bearberry, Bilberry, Blueberry (lowbush), Cloudberry, Cranberry, Lingonberry, Muntries, Partridgeberry, Strawberry

PESTS	DOSAGE	REMARKS
	(mL Oberon TM	
	Flowable Insecticide-	
	Miticide/ha)	
Two-spotted	$880 - 1{,}160$	Pre-harvest Interval (PHI): 3 days.
spider mite,		Maximum Oberon TM Flowable Insecticide-Miticide
Whiteflies		allowed per 7-day interval: 1,160 mL/ha.
(including		Maximum Oberon TM Flowable Insecticide-Miticide
silverleaf,		allowed per crop season: 3,480 mL/ha.
sweet potato		Maximum number of applications per crop season: 3.

and	Minimum application volume: 100 L/ha – ground, 50
greenhouse)	L/ha – aerial application.

FIELD CORN,	FIELD CORN, SEED CORN, POP CORN, SWEET CORN, and SORGHUM				
PESTS	DOSAGE	REMARKS			
	(mL Oberon				
	Flowwable Insecticide-				
	Miticide/ha)				
Banks grass mite,	400 - 600	Pre-harvest Interval (PHI): green forage – 5 days; grain or stover – 30 days.			
Two-spotted		Maximum Oberon TM Flowable Insecticide-Miticide			
spider mite		allowed per 14-day interval: 600 mL/ha.			
spraer mite		Maximum Oberon TM Flowable Insecticide-Miticide			
		allowed per crop season: 1,200 mL/ha.			
		Maximum number of applications per crop season: 2.			
		Minimum application volume: 100 L/ha – ground, 50			
		L/ha – aerial application.			

WHEAT		
PESTS	DOSAGE (mL Oberon TM Flowable Insecticide- Miticide/ha)	REMARKS
Banks grass mite, Two-spotted spider mite	400	Pre-harvest Interval (PHI): green forage – 5 days; grain or stover – 30 days. Maximum Oberon TM Flowable Insecticide-Miticide allowed per 14-day interval: 400 mL/ha. Maximum Oberon TM Flowable Insecticide-Miticide allowed per crop season: 800 mL/ha. Maximum number of applications per crop season: 2. Minimum application volume: 100 L/ha – ground, 50 L/ha – aerial application.

MINT		
PESTS	DOSAGE (mL Oberon TM Flowable Insecticide- Miticide/ha)	REMARKS
Mint bud mite,	600 – 880	Pre-harvest Interval (PHI): 7 days. Maximum Oberon TM Flowable Insecticide-Miticide allowed per 7-day interval: 880 mL/ha. Maximum Oberon TM Flowable Insecticide-Miticide
Two-spotted spider mite	500 – 600	allowed per crop season: 2,640 mL/ha. Maximum number of applications per crop season: 3. Minimum application volume: 100 L/ha – ground.

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than Bayer CropScience under the User Requested Minor Use Label Expansion program. For these uses, Bayer CropScience has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

ALFALFA (grown for seed)

PESTS	DOSAGE	REMARKS		
	(mL Oberon™			
	Flowable Insecticide-			
	Miticide /ha)			
Two-spotted spider mite	500 - 1000	Three applications may be required to achieve control of persistent mite populations. Scout fields and retreat at a minimum interval of 7 days if needed. Maximum allowed per crop season: 3,000 mL/ha. Minimum application volume: 100 L/ha - ground; 50 L/ha - aerial application.		

GENERAL INFORMATION:

Apply Oberon[™] Flowable Insecticide – Miticide when mites are first observed pre-bloom, early bloom or late bloom when pollinators are not present.

Apply Oberon[™] Flowable Insecticide - Miticide during the pre-bloom and early bloom period prior to placing pollinators (honeybees or leaf cutter bees) in or adjacent to the field to be treated

and/or during the late bloom or post bloom period after pollinators have been removed from the field to be treated. At either timing, do not apply Oberon™ Flowable Insecticide - Miticide when pollinators are actively foraging in the treatment area.

Section 9: Application Instructions and Use Limitations

To prevent potential harm to bee brood, avoid application of this product during crop flowering period or when flowering weeds are present

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

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.

AERIAL APPLICATION: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply when wind speed is greater than 16 km/h at flying height at the site of application. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) fine classification. Reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length MUST NOT exceed 65% of the wing- or rotor-span.

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. If you have questions, call the manufacturer at 1-888-283-6847 or obtain technical advice from the distributor or your provincial agricultural representative. 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.

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.

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 have 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.

BUFFER ZONES: Spot treatments using hand-held equipment do not require a buffer zone.

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

					etres) required f		ion of:
Method of	Crop		Freshwater habitat of depths		Estuarine/Marine habitats of depths		Terrestrial
application	Стор		Less than	Greater	Less than 1	Greater	habitats
			1 m	than 1 m	m	than 1 m	naonais
	Wheat		4	1	1	1	1
Field sprayer	Cucurbit vegetables, Fruiting vegetables, Brassica head and stem vegetable, Leafy vegetables, Tuberous and corm vegetables, Corn (field, seed, sweet, pop), Sorghum, Kohlrabi, Leaf petioles vegetables, Beans (succulent shelled, edible- podded, dry shelled), Dry shelled peas, green onions (crop subgroup 3-07B)		5	2	1	1	1
	Low growing berr Alfalfa grown for Caneberries, Mint	seed,	10	3	1	1	2
	XX/1	Fixed wing	80	10	1	1	20
	Wheat	Rotary wing	95	10	1	1	25
	Corn (field, seed, sweet,	Fixed wing	225	30	5	1	35
	pop), Sorghum	Rotary wing	200	25	1	1	35
	Beans (succulent shelled, edible-	Fixed wing	250	40	5	1	50
Aerial	podded, dry shelled), Dry shelled peas	Rotary wing	300	35	10	1	45
	Tuberous and	Fixed wing	300	35	10	1	40
Alfa	corm vegetables	Rotary wing	225	30	5	1	40
	Alfalfa grown	Fixed wing	800	100	20	4	85
	for seed	Rotary wing	675	85	15	1	65
	Low growing berry,	Fixed wing	800	150	25	10	100
	Caneberries		700	125	20	4	100

The buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pesticides portion of the Canada.ca website. Buffer zones of 800 m (aerial sprayer) CANNOT be modified.

Section 10: Tank Mixes and Mixing Instructions

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Bayer CropScience Inc. at 1-888-283-6847 or www.cropscience.bayer.ca for information before applying any tank mix that is not specifically recommended on this label.

Bayer CropScience Inc. has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) of all potential tank mixes under all environmental conditions or for all crop varieties. Tank mixes that are not specifically listed on this label should be tested on a small area first, under local conditions and using standard practices, to confirm the tank mix is suitable for widespread application.

To determine the physical compatibility of this product with other products, use a jar test.

To prepare the spray, add a portion of the required amount of water to the spray tank. With agitation, then add the required amount of OberonTM Flowable Insecticide-Miticide, including any permitted tank mix partners following the WALES mixing order. Complete filling the tank with balance of water needed. Maintain sufficient agitation during both mixing and application. Spray adjuvants may improve coverage on difficult to wet foliage.

Section 11: Rotational Crop Plant-back Intervals

Rotational Crop Plant-back In	tervals	
Immediate plant-back	30-day plant-back	12-month plant-back
Field Corn, Seed Corn	Alfalfa	All other crops
Fruiting vegetables	Barley	
Leafy vegetables	Sugarbeets	
Cucurbits		
Tuber Vegetables		
Green Onions (Crop		
Subgroup 3-07B)		

Strawberry	
Wheat	

Section 12: Pre-Harvest Intervals

Pre-Harvest Intervals (PHI)	
Crop	Pre-harvest interval (days)
Field Corn,	5
Seed Corn,	
Pop Corn,	
Sweet Corn	
Sorghum	
Wheat – green forage	
Field Corn,	30
Seed Corn,	
Pop Corn,	
Sweet Corn	
Sorghum	
Wheat – grain, stover	
Cucurbit vegetables	1
Fruiting vegetables	1
Leafy vegetables	7
Brassica head and stem vegetables	7
Leaf petioles vegetables	7
Tuberous and corm vegetables	7
Green onions (Crop Subgroup 3-07B)	7
Low Growing Berry (Crop Subgroup 13-07-	3
G)	
Caneberry (Crop Subgroup 13-07A)	3
Mint	7
Dry Shelled Peas	10
Succulent and Edible-podded Beans	1
Dry Shelled Beans	10

Section 13: Restricted Entry Interval

Restricted Entry Interval (REI)

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours following application.

A restricted entry interval of 2 days is required for workers entering Brassica Leafy Vegetables (Crop group 5) to perform hand harvesting and hand pruning activities.

PPE required for early entry to treated areas that involves contact with anything that has been treated such as plants, soil or water, are:

- Coveralls over short sleeved shirt and short pants;
- Chemical resistant gloves;
- Shoes plus socks.

Section 14: Resistance Management Recommendations

For resistance management, please note that OberonTM Flowable Insecticide-Miticide contains a Group 23 insecticide. Any insect population may contain individuals naturally resistant to OberonTM Flowable Insecticide-Miticide and other Group 23 insecticides. The resistant individuals may dominate the insect population if this group of insecticides is used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action, but 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 OberonTM Flowable Insecticide-Miticide or other Group 23 insecticides with different groups that control the same pests in a field.
- Use tank mixtures with insecticides/acaricides 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.
- Before applying OberonTM Flowable Insecticide-Miticide, correctly identify the pest and ensure economic and agronomic thresholds are met as recommended by local provincial or IPM specialists.
- 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 Bayer CropScience via internet at www.cropscience.bayer.ca or phone 1-888-283-6847.

Oberon is a trademark of Bayer



container label

GROUP INSECTICIDE

OberonTM Flowable Insecticide-Miticide

For control of mites and whiteflies on field, vegetable and fruit crops

COMMERCIAL

SUSPENSION

ACTIVE INGREDIENT: Spiromesifen 240 g/L

Contains 1,2 benzisothiazolin-3-one at 0.04%, 5-chloro-2-methyl-4-isothiazolin-3-one at 0.001% and 2-methyl-4-isothiazolin-3-one at 0.0004% as preservatives.

REGISTRATION NO. 28905 PEST CONTROL PRODUCTS ACT



POISON

EYE IRRITANT

READ THE LABEL AND THIS LEAFLET BEFORE USING

NET CONTENTS: 1 L to 1000 L

Bayer CropScience Inc.* Suite 200, 160 Quarry Park Blvd. S.E. Calgary, Alberta T2C 3G3 Product Information: 1-888-283-6847

www.cropscience.bayer.ca

In case of spills, poisoning or fire, telephone emergency response number 1-800-334-7577 (24 hours a day).

OberonTM Flowable Insecticide-Miticide is for control of listed mites and whiteflies in outdoor field crops, vegetables and fruit.

OberonTM Flowable Insecticide-Miticide is a Suspension Concentrate formulation. The active ingredient contained in OberonTM Flowable Insecticide-Miticide is active by contact on all mite development stages. However, mite juvenile stages are often more susceptible than adults.

OberonTM Flowable Insecticide-Miticide is also effective against whitefly nymphs, plus it has an effect on the pupal stage. Application should be timed to coincide with early threshold levels in developing mite and whitefly populations.

OberonTM Flowable Insecticide-Miticide can be applied by air or ground equipment. However, thorough coverage of all plant parts is required for optimum performance. Performance evaluations should be made 4-10 days following application.

OberonTM Flowable Insecticide-Miticide has translaminar movement throughout the leaf surface, but to assure optimum effectiveness, the product should be applied to wet both the upper and lower surfaces of the leaf canopy.

Visit us at <u>www.cropscience.bayer.ca</u> or phone 1-888-283-6847 for information on recent additional registrations for OberonTM Flowable Insecticide-Miticide.

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN.

May be harmful if swallowed, inhaled, or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes, or clothing. Do not breathe vapour.

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.

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. In addition, wear protective eyewear (goggles or face shield) and a respirator with a NIOSH-approved organic-vapour-removing cartridge with a prefilter approved for pesticides, or a NIOSH-approved canister approved for pesticides during mixing and loading. In addition, wear chemical-resistant headgear during open cab airblast application. Chemical-resistant headgear includes Sou'Wester hat, chemical-resistant rain hat or large brimmed waterproof hat and hood with sufficient neck protection. Gloves are not required during application within a closed cab.

Vacate the area to be treated until the application is complete.

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

User Safety Recommendations:

User should:

- 1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- 2. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 3. Remove PPE immediately after handling this product.
- 4. Wash the outside of gloves before removing.
- 5. As soon as possible, wash thoroughly and change into clean clothing.

If this pest control product is to be used on a commodity that may be exported and you require information regarding Maximum Residue Limits for an importing country, please contact Bayer CropScience Canada Inc., at 1-888-283-6847 or www.cropscience.bayer.ca.

FIRST AID:

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

If swallowed	Call a poison control centre or doctor immediately for treatment advice.
	Do not induce vomiting unless told to do so by a poison control centre or
	doctor.
	Do not give any liquid to the person. Do not give anything by mouth to an
	unconscious person.
If 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 on skin or	Take off contaminated clothing. Rinse skin immediately with plenty of water
clothing	for 15-20 minutes.
_	Call a poison control centre or doctor for treatment advice.
If inhaled	Move person to fresh air.
	If person is not breathing, call 911 or an ambulance, then give artificial
	respiration, preferably by mouth-to-mouth, if possible.
	Call a poison control centre or doctor for further treatment advice.

TOXICOLOGICAL INFORMATION:

No specific antidote is available. Treat symptomatically. Product contains a petroleum distillate. Vomiting may cause aspiration pneumonia.

ENVIRONMENTAL PRECAUTIONS

TOXIC to certain beneficial arthropods (which may include predatory and parasitic insects, spiders, and mites). Minimize spray drift to reduce harmful effects on beneficial arthropods in habitats next to the application site such as hedgerows and woodland.

To reduce runoff from treated areas into aquatic habitats, avoid application to areas with a moderate to steep slope, compacted soil, or clay. Avoid application of this product when heavy

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

May be toxic to bee brood. Bee brood may be exposed to residues on pollen and nectar brought back to the hive by bees foraging on flowering crops and weeds. To minimize potential exposure to bees, avoid application if bees are visiting the treatment area. Minimize spray drift to habitats close to the application site.

STORAGE

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed.

Store in original container and out of the reach of children, preferably in a locked storage area. Store in a cool, dry place.

Do not store below freezing.

DISPOSAL

Recyclable Container:

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.

Disposal of Unused, Unwanted Product: 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 cleanup of spills.

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.