PMRA APPROVED – DS Sub. No. 2017-8185 MAR 2017 Last approved label 2013-0051



GROUP 23 INSECTICIDE

Oberon[™] 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



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).

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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.

Oberon[™] 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.

When handling the product, wear long-sleeved shirt, long pants, and chemical-resistant gloves. Mixer/loaders should also wear a respirator with appropriate filter, and goggles or face shield in

addition to the above. Applicators must also wear a chemical resistant hat, long-sleeved shirt, long pants, and chemical-resistant gloves when using open cab airblast application equipment.

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 <u>www.cropscience.bayer.ca</u>.

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 of	
clothing	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.	
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TOXICOLOGICAL INFORMATION:

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

Section 5: Environmental Hazards

TOXIC to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE. 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. Use with caution in a pest management program utilizing beneficial insects. Do not mix, load or clean equipment within 30 metres of wellheads or aquatic systems.

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 (e.g. 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.

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
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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:

Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
 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 [™] Flowable Insecticide-Miticide
Whiteflies		allowed per 7-day interval: 600 mL/ha.
(including		Maximum Oberon [™] 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.

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 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, 50
		L/ha – aerial application.
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BRASSICA HEAD AND STEM VEGETABLE (Crop Group 5-13)

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

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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, 50
		L/ha – aerial application.

KOHLRABI		
PESTS	DOSAGE	REMARKS

	(mL Oberon TM Flowable Insecticide- Miticide/ha)	
Whiteflies (including silverleaf, sweetpotato and greenhouse)	500 - 600	Pre-harvest Interval (PHI): 7 days. Maximum Oberon [™] Flowable Insecticide-Miticide allowed per 7-day interval: 600 mL/ha. Maximum Oberon [™] 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, 50 L/ha – aerial application.

LEAF PETIOLES VEGETABLES (Crop Subgroup 22B)		
Cardoon, celer	y, 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, 50
		L/ha – aerial application.

SUCCULENT SHELLED, EDIBLE-PODDED AND DRY SHELLED BEANS

Lupinus spp., includes grain lupin, sweet lupin, white lupin, and white sweet lupin; haseolus 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
1 LOID	$(mL \ Oberon^{TM})$	
	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,		Maximum Oberon [™] Flowable Insecticide-Miticide
Whiteflies		allowed per 7-day interval: 600 mL/ha.

(Including	Maximum Oberon [™] Flowable Insecticide-Miticide
Silverleaf,	allowed per crop season: 1,800 mL/ha.
Sweetpotato	Maximum number of applications per crop season: 3.
and	Minimum application volume: 100 L/ha – ground, 50
Greenhouse)	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.

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PESTS	DOSAGE	REMARKS
	(mL Oberon TM	
	Flowable Insecticide-	
	Miticide/ha)	
Broad mite,	500 - 600	Pre-harvest Interval (PHI): 10 days.
Two-spotted		Maximum Oberon TM 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 TM	
	Flowable Insecticide-	
	Miticide/ha)	
Broad mite,	500 - 600	Pre-harvest Interval (PHI):1 day.
Two-spotted		Maximum Oberon TM Flowable Insecticide-Miticide
spider mite,		allowed per 7-day interval: 600 mL/ha.
Whiteflies		Maximum Oberon TM Flowable Insecticide-Miticide
(including		allowed per crop season: 1,800 mL/ha.

silverleaf,	Maximu	m number of applications per crop season: 3.
sweetpotato and	Minimu	m application volume: 100 L/ha – ground, 50
greenhouse)	L/ha – a	erial application.

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 TM	
	Flowable Insecticide-	
	Miticide/ha)	
Two-spotted	500 - 600	Pre-harvest Interval (PHI): 1 day.
spider mite,		Maximum Oberon TM Flowable Insecticide-Miticide
Whiteflies		allowed per 7-day interval: 600 mL/ha.
(including		Maximum Oberon [™] Flowable Insecticide-Miticide
silverleaf,		allowed per crop season: 1,800 mL/ha.
sweet potato		Maximum number of applications per crop season: 3.
andgreenhouse		Minimum application volume: 100 L/ha – ground, 50
)		L/ha – aerial application.

NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS (BELOW): The DIRECTIONS FOR USE for this product for the use(s) described on this label were developed by persons other than Bayer CropScience and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Bayer CropScience itself makes no representation or warranty with respect to performance (efficacy) or crop tolerance (phytotoxicity) claims for this product when used on the crop(s) listed on this Label.

Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Bayer CropScience harmless from any claims based on efficacy or phytotoxicity in connection with the uses described on this Label.

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 mL/ha	Remarks
Two-spotted spider mite, McDaniel spider mite	880 – 1,160	Pre-harvest Interval (PHI): 3 days. Maximum Oberon [™] Flowable Insecticide-Miticide allowed per 7-day interval: 1,160 mL/ha. Maximum Oberon [™] Flowable Insecticide-Miticide 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

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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 [™] 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, SEED CORN, POP CORN, SWEET CORN, and SORGHUM							
PESTS	PESTS DOSAGE REMARKS						
	(mL Oberon						
Flowwable Insecticide-							

	Miticide/ha)	
Banks grass mite, Two-spotted spider mite	400 – 600	Pre-harvest Interval (PHI): green forage – 5 days; grain or stover – 30 days. Maximum Oberon [™] Flowable Insecticide-Miticide allowed per 14-day interval: 600 mL/ha. Maximum Oberon [™] 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-	REMARKS
	Miticide/ha)	
Banks grass mite, Two-spotted spider mite	400	Pre-harvest Interval (PHI): green forage – 5 days; grain or stover – 30 days. Maximum Oberon [™] Flowable Insecticide-Miticide allowed per 14-day interval: 400 mL/ha. Maximum Oberon [™] 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	REMARKS
	(mL Oberon TM	
	Flowable Insecticide-	
	Miticide/ha)	
Mint bud mite,	600 - 880	Pre-harvest Interval (PHI): 7 days.
		Maximum Oberon [™] Flowable Insecticide-Miticide
		allowed per 7-day interval: 880 mL/ha.
		Maximum Oberon [™] 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, 50 L/ha – aerial application
		L/ha – aerial application.

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ALFALFA (grown for seed)

PESTS	DOSAGE (mL Oberon TM Flowable Insecticide- Miticide /ha)	REMARKS
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

DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands), estuaries or marine habitats.

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.

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: USE OF THE FOLLOWING SPRAY METHODS OR EQUIPMENT Do NOT require a buffer zone: hand-held or backpack sprayer and spot treatment.

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.

Method of	Crop	Buffer Zones (metres) required for the protection of:					
application		Freshwa	ter habitat of	Estuarine/Marine		Terrestria	
		d	epths	habitats of depths		l habitats	
		Less Greater		Less	Greater		
		than 1 than 1 m		than 1 m	than 1 m		
		m					

Field sprayer*	Curcurbit vegetables, Fruiting vegetables, Brassica vegetables, Leafy green vegetables, Tuberous and corm Vegetables, Field corn, Seed Corn	5	2	1	1	1
	Strawberry, Alfalfa grown for seed	10	3	1	1	2
	Caneberries	10	3	1	1	2
Aerial application**	Field Corn, Seed Corn	225	30	5	1	35
(fixed wing)	Tuberous and corm vegetables	300	35	10	1	40
	Alfalfa grown for seed	800	100	20	4	85
	Caneberries	800	150	25	10	100
Aerial application**	Field Corn, Seed Corn	200	25	1	1	35
(rotary wing)	Tuberous and corm vegetables	225	30	5	1	40
	Alfalfa grown for seed	675	85	15	1	65
	Caneberries	700	125	20	4	100

*For field sprayer application, buffer zones can be reduced with the use of drift reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy or ground, the labelled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labelled buffer zone can be reduced by 30%.

**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 Pest Management Regulatory Agency web site. Buffer zones of 800 m (aerial sprayer) CANNOT be modified.

Section 10: Rotational Crop Plant-back Intervals

Rotational Crop Plant-back Intervals				
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	
Strawberry	
Wheat	

Section 11: Pre-Harvest and Restricted Entry Intervals

Pre-Harvest Intervals (PHI)	
Сгор	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
Low Growing Berry (Crop Subgroup 13-07-G)	3
Caneberry (Crop Subgroup 13-07A)	3
Mint	7
Dry Shelled Peas	10
Succulent and Edible-podded Beans	1
Dry Shelled Beans	10

Section 12: 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 13: MIXING INSTRUCTIONS

To prepare the spray, add a portion of the required amount of water to the spray tank and with agitation, then add the required amount of OberonTM Flowable Insecticide/Miticide. 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 14: RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, please note that Oberon[™] Flowable Insecticide-Miticide contains a Group 23 insecticide. Any insect population may contain individuals naturally resistant to Oberon[™] 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 Oberon[™] 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 <u>www.cropscience.bayer.ca</u> or phone 1-888-283-6847.

Oberon is a registered trademark of Bayer



GROUP 23 INSECTICIDE

Oberon[™] 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



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 www.bayercropscience.ca 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.

When handling the product, wear long-sleeved shirt, long pants, and chemical-resistant gloves. Mixer/loaders should also wear a respirator with appropriate filter, and goggles or face shield in addition to the above. Applicators must also wear a chemical resistant hat, long-sleeved shirt, long pants, and chemical-resistant gloves when using open cab airblast application equipment. 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 <u>www.cropscience.bayer.ca</u>.

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.		
n swanowea	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.

TOXIC to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE. 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. Use with caution in a pest management program utilizing beneficial insects. Do not mix, load or clean equipment within 30 metres of wellheads or aquatic systems. 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 (e.g. 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.

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.

ENVIRONMENTAL HAZARDS

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.

DISCLAIMER: The user assumes the risk to persons or property that arises from any use of this product in a way that is inconsistent with the directions on the label.