

GROUPS	4	28	INSECTICIDES
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MINECTO™ DUO 40WG

INSECTICIDE

COMMERCIAL

WETTABLE GRANULE

Broad spectrum insecticide for control of listed insect pests on leafy, Brassica, fruiting and cucurbit vegetables and potatoes

GUARANTEE:

Thiamethoxam	20%
Cyantraniliprole	20%

**READ THE LABEL AND BOOKLET BEFORE USING
KEEP OUT OF THE REACH OF CHILDREN**

REGISTRATION NO.:**30900**
PEST CONTROL PRODUCTS ACT

Syngenta Canada Inc.
140 Research Lane, Research Park
Guelph, ON
N1G 4Z3
Telephone: 1-877-964-3682

Label

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. The user assumes the risk to persons or property that arises from any such use of this product.

FIRST AID

IF POISONING IS SUSPECTED, call a doctor or poison control centre **IMMEDIATELY**. 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. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. 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 clothing, take off contaminated clothing. Rinse skin **IMMEDIATELY** with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

If 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

There is no specific antidote for this product if ingested. Treat symptomatically.

PRECAUTIONS

Safety Precautions:

1. Hazard to humans and domestic animals.
2. KEEP OUT OF THE REACH OF CHILDREN and domestic animals.
3. Wash hands and face after handling and before eating or smoking.
4. Wear long-sleeved shirt, long pants, chemical resistant gloves, socks and boots and safety glasses or goggles when mixing and loading this product. Wear long-sleeved shirt, long pants, socks and boots during application. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
5. Wash personal protective equipment (PPE) after each use. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables are available, use detergent and hot water. Keep and wash PPE separately from other laundry.
6. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
7. Avoid contamination of feed and foodstuffs.

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

Environmental Precautions:

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 apply by air.

Apply by closed cab groundboom only.

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

Toxic to bees. This product is systemic and bees can be exposed to product residues in flower, leaves, pollen and/or nectar resulting from soil applications.

The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g. sandy soil) and/or the depth to the water table is shallow.

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.

TOXIC to aquatic organisms. 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.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at www.croplife.ca.

STORE IN A COOL, DRY PLACE.

DECONTAMINATION AND DISPOSAL

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean up of spills.

CONTAINER DISPOSAL:**FOR DISPOSAL OF PLASTIC JUGS:**

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.

***IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING,
CALL 1-800-327-8633 (1-800-FASTMED)***

GENERAL INFORMATION

MINECTO™ DUO 40WG is a soil applied insecticide with dual modes of action that controls listed lepidopteran, sucking and chewing insect pests. MINECTO DUO 40WG also provides residual control of key insect pests in vegetables and potatoes.

When MINECTO DUO 40WG is applied to the soil, it is readily taken up by the roots of germinating seedlings or transplants and it is rapidly translocated throughout the plant.

DIRECTIONS FOR USE

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.

MIXING INSTRUCTIONS:

1. Add 1/2 of the required amount of water to the mix tank.
2. With the agitator running, add the MINECTO DUO 40WG to the tank.
3. Continue agitation while adding the remainder of the water.
4. Begin application of the solution after the MINECTO DUO 40WG has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean spray equipment before using this product. Vigorous agitation is necessary for proper dispersal of the product. Maintain maximum agitation throughout the spraying operation. Do not let the spray mixture stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area. Keep product container tightly closed when not in use.

APPLICATION METHOD:

Soil Application: Apply specified dosage in sufficient water volume to ensure uniform application and incorporation at least 5 cm (2 in) into the soil. Apply as an in-furrow spray at the seeding or transplant depth or a narrow surface band above the seedline during planting. For

surface-banded applications, incorporate to the seeding depth with sufficient sprinkle or drip irrigation within 24 hours.

Spray nozzles should provide accurate and uniform spray deposition. To help ensure accuracy, calibrate sprayer before each use. Applications using sufficient water volume to provide thorough and uniform coverage generally provide the most effective pest control. For information on spray equipment and calibration, consult sprayer manufacturers and/or your local agricultural representative specialists.

USE DIRECTIONS

CROP GROUP 4: LEAFY VEGETABLES	
CROP	Crop Group 4: Leafy Vegetables – amaranth (leafy amaranth, Chinese spinach, tampala), arugula (roquette), cardoon, celery, Chinese celery, celtuce, chervil, edible-leaved chrysanthemum, garland chrysanthemum, corn salad, garden cress, upland cress, dandelion, dock (sorrel), endive (escarole), Florence fennel, head and leaf lettuce, orach, parsley, garden purslane, winter purslane, radicchio (red chicory), rhubarb, spinach, New Zealand spinach, vine spinach and Swiss chard
PEST	Control of aphids, dipteran leafminers and leafhoppers. Early season control of cabbage looper. Early season suppression of flea beetles. Reduces damage caused by beet armyworm, corn earworm and fall armyworm.
RATE	750 g/ha See Rate Conversion Chart – Vegetables for rates per 100 m row.
APPLICATION METHOD	Ground application
APPLICATION TIMING	In-furrow application at the seeding or transplant depth, or a narrow surface band above the seedline during planting.
NOTES	Apply in sufficient water volume to ensure uniform application and incorporation at least 5 cm (2 in) into the soil. Apply only one application per season. DO NOT use a foliar application of a product containing a Group 4 (neonicotinoid) or Group 28 (diamide) insecticide following in-furrow or soil application of MINECTO DUO 40WG.

CROP GROUP 5: BRASSICA VEGETABLES	
CROP	Crop Group 5: Brassica Vegetables –broccoli, Chinese broccoli (gai lon), broccoli raab (rapini), Brussels sprouts, cabbage, Chinese cabbage (bok choy), Chinese cabbage (napa), Chinese mustard cabbage (gai choy), cauliflower, cavolo broccolo, collards, kale, kohlrabi, mizuna, mustard greens, mustard spinach and rape greens
PEST	Control of aphids, dipteran leafminers and flea beetles. Early season control of cabbage looper, diamondback moth and imported cabbageworm. Early season suppression of flea beetles and thrips. Reduces damage caused by beet armyworm, corn earworm, fall armyworm and yellowstriped armyworm.
RATE	750 g/ha
APPLICATION METHOD	Ground application
APPLICATION TIMING	In-furrow application at the seeding or transplant depth, or a narrow surface band above the seedline during planting.
NOTES	Apply in sufficient water volume to ensure uniform application and incorporation at least 5 cm (2 in) into the soil. Apply only one application per season. DO NOT use a foliar application of a product containing a Group 4 (neonicotinoid) or Group 28 (diamide) insecticide following in-furrow or soil application of MINECTO DUO 40WG.

CROP GROUP 8-09: FRUITING VEGETABLES	
CROP	Crop Group 8-09: Fruiting Vegetables –African eggplant, currant tomato, eggplant, garden huckleberry, goji berry, groundcherry, martynia, okra, pea eggplant, pepino, bell pepper, non-bell pepper, scarlet eggplant, sunberry, tomatillo, tomato, and cultivars, varieties and hybrids of these commodities
PEST	Control of aphids, Colorado potato beetle, dipteran leafminers, leafhoppers and potato psyllid. Early season control of cabbage looper. Early season suppression of flea beetles and thrips. Reduces damage caused by beet armyworm, fall armyworm, tomato fruitworm and yellowstriped armyworm.
RATE	440 - 750 g/ha See Rate Conversion Chart – Vegetables for rates per 100 m row. Use the high rate for beet armyworm, fall armyworm, tomato fruitworm and yellowstriped armyworm.
APPLICATION METHOD	Ground application
APPLICATION TIMING	In-furrow application at the seeding or transplant depth, or a narrow surface band above the seedline during planting.
NOTES	Apply in sufficient water volume to ensure uniform application and incorporation at least 5 cm (2 in) into the soil. Apply only one application per season. DO NOT use a foliar application of a product containing a Group 4 (neonicotinoid) or Group 28 (diamide) insecticide following in-furrow or soil application of MINECTO DUO 40WG.

CROP GROUP 9: CUCURBIT VEGETABLES	
CROP	Crop Group 9: Cucurbit Vegetables –Chinese waxgourd (Chinese preserving melon), citron melon, cucumber, gherkin, edible gourd (includes hyotan, cucuzza, hechima, Chinese okra), <i>Momordica</i> spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), muskmelon (includes true cantaloupe, 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, zucchini), winter squash (includes butternut squash, calabaza, hubbard squash acorn squash, spaghetti squash), watermelon
PEST	Control of aphids, dipteran leafminers and leafhoppers. Early season suppression of cucumber beetles, flea beetles and thrips.
RATE	750 g/ha See Rate Conversion Chart – Vegetables for rates per 100 m row.
APPLICATION METHOD	Ground application
APPLICATION TIMING	In-furrow application at the seeding or transplant depth, or a narrow surface band above the seedline during planting.
NOTES	Apply in sufficient water volume to ensure uniform application and incorporation at least 5 cm (2 in) into the soil. Apply only one application per season. DO NOT use a foliar application of a product containing a Group 4 (neonicotinoid) or Group 28 (diamide) insecticide following in-furrow or soil application of MINECTO DUO 40WG.
POTATOES	
CROP	Potatoes
PEST	Aphids, Colorado potato beetle, flea beetles, potato leafhopper
RATE	440 to 700 g/ha See Rate Conversion Chart – Potatoes for rates per 100 m row.
APPLICATION METHOD	Ground application
APPLICATION TIMING	In-furrow application at the seeding depth, or a narrow surface band above the seedline during planting.
NOTES	Apply in sufficient water volume to ensure uniform application and incorporation into the soil. DO NOT use a foliar application of a product containing a Group 4 (neonicotinoid) or Group 28 (diamide) insecticide following in-furrow or soil application of MINECTO DUO 40WG.

MINECTO DUO 40WG – RATE CONVERSION CHART – VEGETABLES

Rate g product /ha	Rate in g product/100 m row of product for specified row spacing							
	Row Spacing (cm)							
	15	30	46	51	62	76	91	100
440	0.66	1.32	2.02	2.24	2.73	3.34	4.00	4.40
750	1.13	2.25	3.45	3.83	4.65	5.70	6.83	7.50
Rate g product /ha	Rate in g product/100 m row of product for specified row spacing							
	Row Spacing (cm)							
	110	120	150	180	210	240	270	300
440	4.84	5.28	6.60	7.92	9.24	10.56	11.88	13.20
750	8.25	9.00	11.25	13.50	15.75	18.00	20.25	22.50

MINECTO DUO 40WG – RATE CONVERSION CHART - POTATOES

Rate g product /ha	Rate in g product/100 m row of product for specified row spacing													
	Row Spacing (cm)													
	75	80	85	90	95	100	105	110	115	120	125	150	185	215
440	3.30	3.52	3.74	3.96	4.18	4.40	4.62	4.84	5.06	5.28	5.50	6.60	8.14	9.46
700	5.63	6.00	6.38	6.75	7.13	7.50	7.88	8.25	8.63	9.00	9.38	11.25	13.88	16.13

Rotational Restrictions**Recommended Plant-Back Intervals (PBI) for Rotational Crops**

PBI	CROPS
0 days	Crop Group 1C (Tuberous and corm vegetables); Crop Group 3-07 (Bulb vegetables); Crop Group 4 (Leafy vegetables; except <i>Brassica</i> vegetables); Crop Group 5 (<i>Brassica</i> (Cole) leafy vegetables); Crop Group 8-09 (Fruiting vegetables); Crop Group 9 (Cucurbit vegetables); Crop Group 13-07B (Bushberry subgroup); Crop Group 20 (Oilseed)
30 days	Crop Group 1A (Root and tuber vegetables); Crop Group 2 (Leaves of root and tuber vegetables); Crop Group 6 (Legume vegetables (succulent or dried)); Crop Group 7 (Foliage of legume vegetables); Crop Group 13-07G (Lowgrowing berry subgroup); Crop Group 15 (Cereal grains); Crop Group 16 (Forage, fodder, and straw of cereal grains); Crop Group 17 (Grass forage, fodder, and hay); Crop Group 18 (Nongrass animal feeds: Forage, fodder, straw and hay)
365 days	Other crops

Resistance-Management Recommendations

For resistance management, please note that MINECTO DUO 40WG contains a Group 4A insecticide (thiamethoxam, belonging to the neonicotinoid class of chemistry) and a Group 28 insecticide (cyantraniliprole, belonging to the diamide class of chemistry). Any insect population may contain individuals naturally resistant to MINECTO DUO 40WG and other Group 4 or 28 insecticides. The resistant individuals may dominate the insect population if this group of

insecticides is used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action but are specific for individual chemicals, such as enhanced metabolism, may also exist. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies established for the crop and use area.

To delay insecticide resistance:

Where possible, rotate the use of MINECTO DUO 40WG or other Group 4 or 28 insecticides with different groups that control the same pests in a field.

Use tank mixtures with miticides/insecticides from a different group when such use is permitted.

Insecticide use should be based on an IPM program that includes scouting, record keeping, and considers cultural, biological and other chemical control practices.

Monitor treated pest populations for resistance development. If resistance is suspected, do not reapply MINECTO DUO 40WG or other Group 4A or Group 28 insecticides.

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 company representatives at 1-87-SYNGENTA (1-877-964-3682) or at www.syngenta.ca.

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