

# SUPPLEMENTAL LABELING

## DUPONT™ CORAGEN® INSECT CONTROL AT-PLANT SOIL APPLICATION ON VEGETABLES

### DuPont Crop Protection

## DUPONT™ CORAGEN® INSECTICIDE

EPA Reg. No. 352-729

### AT-PLANT SOIL APPLICATIONS ON BRASSICA (CROP GROUP 5), CUCURBIT (CROP GROUP 9), FRUITING (CROP GROUP 8) AND LEAFY (CROP GROUP 4) VEGETABLES

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

#### GENERAL INFORMATION

CORAGEN® is a suspension concentration that can be applied as: an in-furrow spray at planting, transplant water treatment, hill drench at planting, surface band at planting, soil shank injection at planting, drip chemigation, or foliar spray to control many important insects. CORAGEN® is mixed with water for application.

#### Resistance Management

Unless directed otherwise in the specific crop/pest sections of this label, the best practices are to follow these instructions to delay the development of insecticide resistance: Avoid using the same mode of action (same insecticide group) on consecutive generations of insect pests. Make no more than 2 applications of CORAGEN® per generation to the same insect species on a crop. Application(s) to the next generation of target pest(s) must be with an effective product with a different mode of action. Make no more than 2 successive applications within a 30 day period to the same insect species on a crop. The following application to the target pest(s) must be with an effective product with a different mode of action.

See label accompanying product for full resistance management instructions.

#### APPLICATION

Apply follow-up treatments of DuPont™ CORAGEN®, as specified, to keep pest populations within threshold limits. Refer to the Resistance Management section of this label for further guidance on follow-up treatments. See individual crop sections of this label for specific minimum application interval.

CORAGEN® may be applied by in-furrow spray at planting, transplant water treatment, hill drench at planting, surface band at planting or soil shank injection at planting. Use a minimum of 10 gal per acre (GPA) of water for all crops.

Refer to the table on pages 2-5 of this supplemental label for additional application information, rates and timing.

#### SOIL APPLICATIONS

CORAGEN™ must be applied in a manner that ensures the product is in the root zone. CORAGEN® must be in the root zone to provide effective control of target pests. CORAGEN® is most effective when it is applied so that the roots are at or near the site of application; manage irrigation so that significant quantities of CORAGEN® remain in the root zone where it is most effective. Unless directed otherwise in the specific crop sections of this label, only one soil application of CORAGEN® may be made per crop season, except for drip chemigation where a total of two applications can be made per season.. If CORAGEN® is applied as an at plant soil application, only one subsequent drip chemigation application can be made.

#### In-Furrow Spray at Planting

Apply as a narrow band spray into the furrow at the seeding depth.

#### Transplant water treatment or Hill Drench

Transplants must be adequately watered before transplanting. Apply at transplanting in a minimum of 2 ounces of treatment solution per transplant. Ensure water volume is sufficient to thoroughly wet the root zone.

#### Surface Band at Planting

Apply as a narrow (2 inches or less) surface band spray above the seed line at planting. Incorporate surface band application within 24 hours of application using sufficient irrigation (usually 0.5 – 1.0 inches of water) to reach the seeding depth.

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**Soil Shank Injection**

Use soil shank injection at planting. Applications must be incorporated using sufficient irrigation (usually 0.5 – 1.0 inches of water) to reach the root zone. Shank injection must be placed in the seed row or just below the seed line, within 1 - 2 inches of the seed line.

For insecticide resistance management it is important to avoid consecutive applications of insecticides with the same mode of action on successive generations of the same pest.

See crops on label for recommended treatment rates and additional use information.

Crop	Application Method	Target Pest	DUPONT™ CORAGEN® RATE			
			Lb. ai per acre	fluid ounces product per acre	Last Application (Days to Harvest)	REI (Hours)
<b>Brassica (Cole)</b> <b>Leafy Vegetables</b> Including <b>Broccoli</b> , Broccoli (chinese), Broccoli raab, <b>Brussels sprouts</b> , <b>Cabbage</b> , Chinese cabbage (bok choy), Chinese cabbage (napa), Cabbage (Chinese mustard), <b>Cauliflower</b> , Cavalo broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens	SOIL AT PLANTING† (an in-furrow spray transplant water treatment, hill drench, surface band, soil shank injection)	Beet armyworm Diamondback moth* Cabbage looper Corn earworm Cross -striped cabbageworm Hawaiian beet webworm Imported cabbageworm	0.045 - 0.065	3.5 - 5.0 See rate conversion chart for rate per 1000 linear feet.	3	4 hr.
	Do not apply more than 15.4 fl oz CORAGEN® (0.2 lbs a.i.) per acre per crop per season. †SOIL APPLICATIONS (an in-furrow spray at planting, transplant water treatment, hill drench at planting, surface band at planting, soil shank injection at planting, or drip chemigation): CORAGEN® must be applied uniformly in the root zone or poor performance will result. Surface band application requires sufficient watering in to ensure the treatment is moved into the rootzone. Do not apply more than 7.5 fl oz (0.098 lb ai per acre) of CORAGEN® to the soil at planting. Do not apply more than 10 fl oz (0.132 lb ai per acre) of CORAGEN® per crop season by any combination of at plant soil application and drip chemigation. Do not make more than 2 drip chemigation applications of CORAGEN® per crop season. Do not make more than one drip chemigation application per crop season if an at plant application of CORAGEN® was made. Refer to the SOIL APPLICATION section of this label for additional guidance; also see the rate conversion chart for application rate per 1000 linear feet. *Diamondback moth resistance management: Do not apply CORAGEN® more than twice to any generation of diamondback moth or within any 30 day period. After the second application of CORAGEN® for diamondback moth, rotate to another effective insecticide with a different mode of action (i.e., a product with a different IRAC group number). Application(s) to the next generation of diamondback moth must be with an effective product with a different mode of action. Do not apply less than 3.5 oz. of CORAGEN® per application per acre for diamondback moth control. Do not make more than 6 total applications per calendar year for control of diamondback moth at the same farm location.					

Crop	Application Method	Target Pest	DUPONT™ CORAGEN® RATE		Last Application (Days to Harvest)	REI (Hours)
			Lb. ai per acre	fluid ounces product per acre		
<b>Cucurbit Vegetables</b> Including chayote (fruit), Chinese wax-gourd (Chinese preserving melon), Citron melon, <b>Cucumber</b> Gherkin, Edible gourd (includes hyotan, cucuzza, hechima, Chinese okra), Momordica spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (includes true cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon), <b>Pumpkin, Summer squash</b> (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini), Winter squash (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash), <b>Watermelon</b>	SOIL AT PLANTING† (an in-furrow spray, transplant water treatment, hill drench, surface band, soil shank injection)	Beet armyworm Cabbage looper	0.045 - 0.065	3.5 - 5.0 See rate conversion chart for rate per 1000 linear ft.	1	4 hr.
		Leafminers (larvae)* Silverleaf whiteflies (nymphs)**	0.065 - 0.098	5.0 - 7.5		
<p>Do not apply more than 15.4 fl oz CORAGEN® (0.2 lbs a.i.) per acre per crop per season.</p> <p>Do not use an adjuvant with applications of CORAGEN® to Cucurbit Vegetables, except on cucumber, Chinese waxgourd, gherkin, and momordica spp. (includes balsam apple, balsam pear, bitter melon, and Chinese cucumber).</p> <p>Adjuvants may be used with CORAGEN® applications to cucumber, Chinese waxgourd, gherkin, and momordica spp. (includes balsam apple, balsam pear, bitter melon, and Chinese cucumber).</p> <p>†<b>SOIL APPLICATIONS</b> (an in-furrow spray at planting, transplant water treatment, hill drench at planting, surface band at planting, soil shank injection at planting, or drip chemigation): CORAGEN® must be applied uniformly in the root zone or poor performance will result. Surface band application requires sufficient watering in to ensure the treatment is moved into the root zone. Do not apply more than 7.5 fl oz (0.098 lb ai per acre) of CORAGEN® to the soil at planting. Do not apply more than 10 fl oz (0.132 lb ai per acre) of CORAGEN® per crop season by any combination of at plant soil application and drip chemigation.</p> <p>Do not make more than one drip chemigation application per crop season if an at plant application of CORAGEN® was made. Refer to the SOIL APPLICATION section of this label for additional guidance; also see the rate conversion chart for application rate per 1000 linear feet.</p> <p>*Control of <i>Liriomyza</i> species except suppression only for <i>L. huidabrensis</i> and <i>L. langei</i>.            ** Suppression only. Use in conjunction with an effective adult whitefly control program.</p>						

Crop	Application Method	Target Pest	DUPONT™ CORAGEN® RATE		Last Application (Days to Harvest)	REI (Hours)
			Lb. ai per acre	fluid ounces product per acre		
<b>Fruiting Vegetables</b> Including Eggplant, Groundcherry ( <i>Physalis</i> spp.), Pepino, <b>Pepper</b> , (including bell pepper, chili pepper, cooking pepper, pimento sweet pepper), Tomatillo, Tomato	SOIL AT PLANTING† (an in-furrow spray, transplant water treatment, hill drench, surface band, soil shank injection)	Beet armyworm Fall armyworm Loopers Southern armyworm Tomato fruitworm Tomato pinworm Western yellow striped armyworm	0.045 - 0.065	3.5 - 5.0  See rate conversion chart for rate per 1000 linear ft.	1	4 hr.
		Leafminers (larvae)* Silverleaf whiteflies (nymphs)**	0.065 - 0.098	5.0 - 7.5		
<p>Do not apply more than 15.4 fl oz CORAGEN® (0.2 lbs a.i.) per acre per crop per season.            Do not use an adjuvant with applications of CORAGEN® to chili pepper or pimento.            Adjuvants may be used with CORAGEN® applications to eggplant, groundcherry, pepino, bell pepper, paprika, cooking pepper, sweet pepper, tomatillo, and tomato .            *Control of <i>Liriomyza</i> species except suppression only for <i>L. huidabrensis</i> and <i>L. langei</i>.            **Suppression only. Use in conjunction with an effective adult whitefly control program.</p> <p>†<b>SOIL APPLICATIONS</b> (an in-furrow spray at planting, transplant water treatment, hill drench at planting, surface band at planting, soil shank injection at planting, or drip chemigation): CORAGEN® must be applied uniformly in the root zone or poor performance will result. Surface band application requires sufficient watering in to ensure the treatment is moved into the root zone. Do not apply more than 7.5 fl oz (0.098 lb ai per acre) of CORAGEN® to the soil at planting. Do not apply more than 10 fl oz (0.132 lb ai per acre) of CORAGEN® per crop season by any combination of at plant soil application and drip chemigation.</p> <p>Do not make more than one drip chemigation application per crop season if an at plant application of CORAGEN® was made. Refer to the SOIL APPLICATION section of this label for additional guidance; also see the rate conversion chart for application rate per 1000 linear feet.</p>						

Crop	Application Method	Target Pest	DUPONT™ CORAGEN® RATE		Last Application (Days to Harvest)	REI (Hours)
			Lb. ai per acre	fluid ounces product per acre		
<b>Leafy Vegetables (non-brassica)</b> Including Amaranth leafy, Arugula, Cardoon, Celery, Celery (chinese), Celtuce, Chevril, Chinese spinach, Chrysanthemum (edible leaved), Chrysanthemum, garland, Corn salad, Cress (garden), Cress (upland), Dandelion, leaves, Dock, Endive (escarole), Florence fennel, <b>Lettuce (head &amp; leaf)</b> , Orach, Parsley, Purslane (garden), (winter), Radicchio, Rhubarb, <b>Spinach</b> , Spinach (vine), Spinach (New Zealand), Swiss chard, Tampala	SOIL AT PLANTING† (an in-furrow spray, transplant water treatment, hill drench, surface band, soil shank injection)	Beet armyworm Corn earworm Cabbage looper	0.045 - 065	3.5 - 5.0 See rate conversion chart for rate per 1000 linear ft.	1	4 hr.
		Leafminers (larvae)** Silverleaf whiteflies (nymphs)***	0.065 - 0.098	5.0 - 7.5		
<p>Do not apply more than 15.4 fl oz CORAGEN® (0.2 lbs a.i.) per acre per crop per season. Do not use adjuvants with applications of CORAGEN® to amaranth; arugula; chervil; chrysanthemum, edible-leaved; chrysanthemum, garland; corn salad; cress, garden; cress, upland; dandelion; dock; endive; orach; parsley; purslane, garden; purslane, winter; spinach; spinach, New Zealand; and spinach, vine.</p> <p>Adjuvants may be used with CORAGEN® applications to cardoon; celery; celery, Chinese; celtuce; fennel, Florence; lettuce, head and leaf; radicchio; rhubarb; and Swiss chard.</p> <p>*Diamondback moth resistance management: Do not apply CORAGEN® more than twice to any generation of diamondback moth or within any 30 day period. After the second application of CORAGEN® for diamondback moth, rotate to another effective insecticide with a different mode of action (i.e. a product with a different IRAC group number). Application(s) to the next generation of diamondback moth must be with an effective product with a different mode of action. Do not apply less than 3.5 oz. of CORAGEN® per application per acre for diamondback moth control. Do not make more than 6 total applications per calendar year for control of diamondback moth at the same farm location.</p> <p>**Control of <i>Liriomyza</i> species except suppression only for <i>L. huidabrensis</i> and <i>L. langei</i>.</p> <p>***Suppression only. Use in conjunction with an effective adult whitefly control program.</p> <p>†<b>SOIL APPLICATIONS</b> (an in-furrow spray at planting, transplant water treatment, hill drench at planting, surface band at planting, soil shank injection at planting, or drip chemigation): CORAGEN® must be applied uniformly in the root zone or poor performance will result. Surface band application requires sufficient watering in to ensure the treatment is moved into the root zone. Do not apply more than 7.5 fl oz (0.098 lb ai per acre) of CORAGEN® to the soil at planting. Do not apply more than 10 fl oz (0.132 lb ai per acre) of CORAGEN® per crop season by any combination of at plant soil application and drip chemigation.</p> <p>Do not make more than one drip chemigation application per crop season if an at plant application of CORAGEN® was made. Refer to the SOIL APPLICATION section of this label for additional guidance; also see the rate conversion chart for application rate per 1000 linear feet.</p>						

**CORAGEN® Conversion Chart for Soil Applications**

Fl oz/acre	Rate in Fluid Ounces Product / 1000 Row-Foot Based on Planted Row Spacing (in inches) of:															
	15	20	25	30	34	36	38	40	46	48	60	66	72	78	80	84
2											0.23	0.25	0.28	0.30	0.30	0.32
3.5				0.20	0.23	0.24	0.25	0.27	0.29	0.32	0.40	0.44	0.48	0.52	0.53	0.56
5		0.19	0.24	0.29	0.33	0.34	0.36	0.38	0.41	0.46	0.57	0.63	0.69	0.75	0.76	0.80
6		0.23	0.29	0.34	0.39	0.41	0.44	0.46	0.49	0.55	0.69	0.76	0.83	0.90	0.91	0.96
7	0.20	0.27	0.33	0.40	0.46	0.48	0.51	0.53	0.58	0.64	0.80	0.88	0.96	1.04	1.07	1.13

Level and length of control is affected by rate applied.

Higher labeled rates may be required in heavy texture and/or high organic soils if application is made later in the crop development, or when pest pressure is high.

**IMPORTANT**

Before using CORAGEN®, read and follow all applicable directions; restrictions; and precautions on the EPA-registered label.

This bulletin contains new or supplemental instructions for use of these products in combination which does not appear on the package label. Follow the instructions carefully.

This labeling must be in the possession of the user at the time of pesticide application.

Read the Limitation of Warranty and Liability on the Section 3 Federal product label before buying or using THIS product. If terms are not acceptable, return the unopened package at once to Seller for full refund of purchase price paid. Otherwise, use by Buyer or any other User constitutes acceptance of the terms of the Limitation of Warranty and Liability on the Section 3 Federal product label.

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