# GROUP 28 INSECTICIDE

# **CORAGEN®** insecticide

#### **SUSPENSION**

FOR SALE FOR USE ON ROOT AND TUBER VEGETABLES GROUP, FRUITING VEGETABLES GROUP, BRASSICA VEGETABLES GROUP, LEAFY VEGETABLES GROUP, LEGUME VEGETABLES GROUP CUCURBIT VEGETABLES GROUP, CORN (FIELD, POP, SWEET, AND SEED), GRASS FORAGE, FODDER, AND HAY GROUP, NON-GRASS ANIMAL FEEDS GROUP, MINT, OKRA, PEANUTS, GREEN ONION SUB GROUP, GLOBE ARTICHOKES, HOPS, GREENHOUSE CUCUMBERS, GREENHOUSE TOMATOES, GREENHOUSE EGGPLANT, GREENHOUSE PEPPERS, OILSEEDS GROUP AND CEREALS

# COMMERCIAL

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

Contains 1,2-benzisothiazolin-3-one at 0.019% as a preservative

or

Contains 5-chloro-2-methyl-4-isothiazolin-3-one at 0.00084% and 2-methyl-4-isothiazolin-3-one at 0.00028% and 2-bromo-2-nitropropane-1,3-diol at 0.0088% as preservatives

ACTIVE INGREDIENT: Chlorantraniliprole 200 g/L

REGISTRATION NO. 28982 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 0.5, 3.79, 100 LITRES

**FMC** Corporation

2929 Walnut Street Philadelphia, PA 19104 1-833-362-7722

# PRECAUTIONS:

- KEEP OUT OF REACH OF CHILDREN.
- Wear a long sleeved shirt, long pants and chemical resistant gloves while mixing /loading, applying and during clean up and repair.
- Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables are available, use detergent and hot water. Keep and wash PPE separately from other laundry.
- Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- For agricultural uses, do not enter or allow worker entry into treated areas during the restricted entry interval of 12 hours.
- See the Aerial Application Label Instructions section of this label for additional precautions specific to aerial application.

### ENVIRONMENTAL HAZARDS:

- Toxic to aquatic organisms. 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.
- Chlorantraniliprole is persistent and may carryover. It is recommended that any products containing chlorantraniliprole not be used in areas treated with this product during the previous season.
- The use of this chemical may result in contamination of groundwater particularly in areas where soil is permeable (e.g. sandy soil) and/or the depth to the water table is shallow.
- 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 strip between the treated area and the edge of the water body.
- **DO NOT** apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, and wetlands), estuarine/marine habitats.
- **DO NOT** contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

#### STORAGE:

Store product in original container only, away from other pesticides, fertilizer, food or feed. Not for use or storage in or around the home. Keep container closed. To prevent contamination, store this product away from food or feed.

#### DISPOSAL:

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.

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.

### 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 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.

**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.

For medical emergencies call 1-800-331-3148 (24 hours).

**TOXICOLOGICAL INFORMATION:** Treat symptomatically. This product contains a petroleum distillate. Vomiting may cause aspiration pneumonia.

#### 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.

<<DFU Booklet>>

# GROUP 28 INSECTICIDE

# **CORAGEN®** insecticide

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Contains 5-chloro-2-methyl-4-isothiazolin-3-one at 0.00084% and 2-methyl-4-isothiazolin-3-one at 0.00028% and 2-bromo-2-nitropropane-1,3-diol at 0.0088% as preservatives

ACTIVE INGREDIENT: Chlorantraniliprole 200 g/L

REGISTRATION NO. 28982 PEST CONTROL PRODUCTS ACT

#### NET CONTENTS: 0.5, 3.79, 100 LITRES

FMC Corporation 2929 Walnut Street Philadelphia, PA 19104 1-833-362-7722

## **GENERAL INFORMATION**

CORAGEN® insecticide is a liquid formulation that can be applied as a foliar spray, using ground application or aerial application (potatoes, sugar beets, garden beets, legume vegetables, corn, oilseeds and cereals only) to control many important insect pests. CORAGEN® insecticide is mixed with water for application.

Apply at the recommended rates when insect populations reach locally determined economic thresholds. Consult your local extension specialist or certified crop advisor to determine appropriate threshold levels for treatment in your area.

Use sufficient water to obtain thorough, uniform coverage.

# DIRECTIONS FOR USE

Do not allow effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waters.

### **ROOT AND TUBER VEGETABLES – Crop Group 1**

**Spray Volume for Tuberous and Corm Vegetables:** Apply in a minimum finished spray volume of 100 L/ha by ground. For potatoes only, apply in a minimum finished spray volume of 50 L/ha by air.

SITE	PEST	RATE CORAGEN® insecticide /ha	SPECIFIC DIRECTIONS
POTATOES	Colorado potato beetle	250 mL to 500 mL	For potatoes, apply by either ground or aerial
	European corn borer	250 mL to 375 mL	application equipment.
ROOT AND TUBER		250 mL	
VEGETABLES	Diamondback moth		Begin applications when treatment
Arracacha;			thresholds have been
Arrowroot;	Cabbage looper		reached. Thorough
Artichoke, Chinese;			coverage is important
Artichoke, Jerusalem; Beet, garden;	Black cutworm		to obtain optimum control.
Beet, sugar;	Imported		
Burdock, edible;	cabbageworm		
Canna, edible;			For Colorado potato
Carrot;	Swede midge		beetle, use the higher
Cassava, bitter and			application rate under
sweet;	Corn earworm	250 mL to 375 mL	heavy pest pressure
Celeriac (celery root);			and/or when larger
Chayote (root);	European corn		larvae are present.
Chervil, turnip-rooted;	borer		Colorado pototo
Chicory;	Tabaaaa		Colorado potato beetle resistance
Chufa;	Tobacco		management: DO
Dasheen (taro); Ginger;	hornworm		NOT apply
Ginger, Ginseng;	Tomato hornworm		CORAGEN®
Horseradish;			insecticide for
Leren;	Armyworm		Colorado potato
Parsley, turnip-rooted;			beetle control if any

Parsnip;	Variegated	Group 28 Insecticide
Potato;	cutworm	was used at planting
Radish;		as an in-furrow, soil or
Radish, oriental (daikon);	Fall armyworm	seed-piece treatment.
Rutabaga;		
Salsify;	Beet armyworm	For control of the
Salsify, black;		European corn borer,
Salsify, Spanish;	Leafminers:	time the application to
Skirret;	Liriomyza sativae	coincide with peak
Sweet potato;	Liriomyza trifolii	egg hatch. Scout for
Tanier (cocoyam);		European corn borer
Turmeric;		by monitoring egg
Turnip;		laying and egg hatch
Yam bean;		to determine
Yam, true		application timing.

# **RESTRICTIONS AND PRECAUTIONS: Tuberous and Corm Vegetables**

- For pests with a range of application rates, use the high rate under heavy pest pressure.
- Do not make more than 4 applications per season.
- Do not apply more than once every 3 days.
- Do not apply less than 1 day before harvest. Observe a 1-day PHI.
- Do not exceed a total of 1.125 litres CORAGEN® insecticide per ha per season.
- Do not make a foliar application of CORAGEN® insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed or seed pieces treated with any Group 28 insecticide.

# LEAFY VEGETABLES – Crop Group 4

**Spray Volume for Leafy Vegetables:** Apply in a minimum finished spray volume of 100 L/ha by ground.

SITE	PEST	RATE CORAGEN® insecticide /ha	SPECIFIC DIRECTIONS
LEAFY VEGETABLES Amaranth leafy, Arugula, Cardoon, Celery, Celery (Chinese), Celtuce, Chevril,	Cabbage looper Black cutworm	250 mL	Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain optimum control.
Chrysanthemum (edible leaved), Chrysanthemum (garland), Corn Salad, Cress (garland), Cress (upland), Dandelion leaves, Dock, Endive, Florence Fennel, Lettuce (head & leaf), Orach, Parsley leaves, Purslane (garden), Purslane (winter), Radicchio, Rhubarb, Spinach, Spinach (vine), Spinach (New Zealand),	Armyworm Fall armyworm Corn earworm Beet armyworm Leafminers: <i>Liriomyza sativae</i> <i>Liriomyza trifolii</i>	250 mL to 375 mL	

# **RESTRICTIONS AND PRECAUTIONS: Leafy Vegetables**

- Do not make more than 4 applications per season.
- Do not apply more than once every 3 days.
- Do not apply less than 1 day before harvest. Observe a 1-day PHI.
- Do not exceed a total of 1 litre of CORAGEN® insecticide per ha per season.
- Do not make a foliar application of CORAGEN® insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed or seed pieces treated with any Group 28 insecticide.

# **BRASSICA VEGETABLES - Crop Group 5**

**Spray Volume for Brassica Vegetables:** Apply in a minimum finished spray volume of 100 L/ha by ground.

SITE	PEST	RATE CORAGEN® insecticide / ha	SPECIFIC DIRECTIONS
BRASSICA VEGETABLES Broccoli, Broccoli (Chinese),	Imported cabbage worm Diamondback moth	250 ml	Begin applications when treatment thresholds have been reached. Thorough
Broccoli raab, Brussels Sprouts, Cabbage,	Cabbage looper		coverage is important to obtain optimum control.
Cabbage (Chinese, bok choy),	Black cutworm		For optimum control,
Cabbage (Chinese, napa),	Armyworm	250 ml to 375 ml	apply Hasten NT Spray Adjuvant* at an
Cabbage (Chinese mustard, choy), Cauliflower,	Fall armyworm		application rate of 0.25% v/v or MSO Contentrate with Leci-
Cavalo broccolo, Collards,	Beet armyworm		Tech* at an application rate of
Kale, Kohlrabi,	Corn earworm		0.5% v/v.
Mizuna, Mustard Greens,	Leafminers: <i>Liriomyza sativae</i>		
Mustard Spinach, Rape Greens	Liriomyza trifolii		

# **RESTRICTIONS AND PRECAUTIONS: Brassica Vegetables**

- Do not make more than 4 applications per season.
- Do not apply more than once every 3 days.
- Do not apply less than 3 days before harvest. Observe a 3-day PHI.
- Do not exceed a total of 1 litre of CORAGEN® insecticide per ha per season.
- Do not make a foliar application of CORAGEN® insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed or seed pieces treated with any Group 28 insecticide.

# **LEGUME VEGETABLES - Crop Group 6**

**Spray Volume for Legume Vegetables:** Apply in a minimum finished spray volume of 100 L/ha by ground. Apply in a minimum finished spray volume of 50 L/ha by air.

SITE	PEST	RATE CORAGEN®	SPECIFIC DIRECTIONS
		insecticide /HA	
LEGUME VEGETABLES	Grasshoppers	125 mL to 250 mL	Begin applications when treatment thresholds have been
Bean (Lupinus) (includes grain lupin,	Cabbage looper	250 mL	reached. Thorough coverage is important
sweet lupin, white lupin, and white sweet	Cutworms		to obtain optimum control.
lupin);	Armyworm	250 mL to 375 mL	
Bean (Phaseolus) (includes field bean,	Fall armyworm	230 me to 373 me	
kidney bean, lima bean, navy bean,	Beet armyworm		
pinto bean, runner bean, snap bean, tepary bean, wax	Corn earworm		
bean);	European corn borer		
Bean (Vigna) (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);	Western bean cutworm		
Broad bean (fava);			
Chickpea (garbanzo);			
Guar;			
Jackbean;			
Lablab bean;			
Lentil;			
Pea (Pisum) (includes dwarf pea, edible- podded pea, English pea, field pea, garden pea, green pea,			

snowpea, sugar snap pea);		
Pigeon pea;		
Sword bean		
Soybean;		

# **RESTRICTIONS AND PRECAUTIONS: Legume Vegetables**

- Do not make more than 4 applications per season.
- Do not apply more than once every 3 days.
- Do not apply less than 1 day before harvest. Observe a 1-day PHI.
- Do not exceed a total of 1.125 litres of CORAGEN® insecticide per ha per season.
- Do not make a foliar application of CORAGEN® insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed or seed pieces treated with any Group 28 insecticide.

### FRUITING VEGETABLES (EXCEPT CUCURBITS) - Crop Group 8

**Spray Volume for Fruiting Vegetables:** Apply in a minimum finished spray volume of 100 L/ha by ground.

SITE	PEST	RATE	SPECIFIC
SITE	1 201		•. =•
			DIRECTIONS
FRUITING VEGETABLES Eggplant, Groundcherry, Pepino, Pepper (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper) Tomatillo, Tomato	Colorado potato beetle Armyworm Fall armyworm Beet armyworm Variegated cutworm Tobacco hornworm Tomato hornworm	CORAGEN® insecticide / ha 250 ml to 375 ml	DIRECTIONS Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain optimum control. Colorado potato beetle resistance management: DO NOT apply CORAGEN® insecticide for Colorado potato beetle control if any Group 28 Insecticide
	Tomato fruitworm (Corn earworm)\		was used at planting as an in-furrow, soil or
	European corn borer		seed treatment.

Cabbage looper	250 ml	
Black cutworm		

#### **RESTRICTIONS AND PRECAUTIONS: Fruiting Vegetables**

- For pests with a range of application rates, use the high rate under heavy pest pressure.
- Do not make more than 4 applications per season.
- Do not apply more than once every 5 days.
- Do not apply less than 1 day before harvest. Observe a 1-day PHI.
- Do not exceed a total of 1.125 litres CORAGEN® insecticide per ha per season.
- Do not make a foliar application of CORAGEN® insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed or seed pieces treated with any Group 28 insecticide.

### CUCURBIT VEGETABLES – Crop Group 9

**Spray Volume for Cucurbit Vegetables:** Apply in a minimum finished spray volume of 100 L/ha by ground.

SITE	PEST	RATE CORAGEN® insecticide / ha	SPECIFIC DIRECTIONS
CUCURBIT VEGETABLES Chayote (fruit); Chinese waxgourd (Chinese preserving	Cabbage looper Black cutworm	250 ml	Begin applications when treatment thresholds have been reached. Thorough coverage is
melon); Citron melon; Cucumber; Gherkin; Gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); Momordica spp (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); Muskmelon (includes cantaloupe); Pumpkin; Squash, summer; Squash, summer; Squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); Watermelon	Armyworm Fall armyworm Corn earworm Leafminers: <i>Liriomyza sativae</i> <i>Liriomyza trifolii</i>	250 ml to 375 ml	important to obtain optimum control.

# **RESTRICTIONS AND PRECAUTIONS: Cucurbit Vegetables**

- For pests with a range of application rates, use the high rate under heavy pest pressure.
- Do not make more than 4 applications per season.
- Do not apply more than once every 5 days.
- Do not apply less than 1 day before harvest. Observe a 1-day PHI.
- Do not exceed a total of 1.125 litres CORAGEN® insecticide per ha per season.
- Do not make a foliar application of CORAGEN® insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed or seed pieces treated with any Group 28 insecticide.

#### CORN - FIELD, POP, SEED AND SWEET

**Spray Volume for Corn:** Apply in a minimum finished spray volume of 100 L/ha by ground. Apply in a minimum finished spray volume of 50 L/ha by air

SITE	PEST	RATE	SPECIFIC
0.1.2	. 201	CORAGEN®	DIRECTIONS
		insecticide / ha	
CORN	Black cutworm	250 ml	Begin applications
			when treatment
Field corn;		Apply either by	thresholds have been
Pop corn;		ground or aerial	reached. Thorough
Seed corn.		application equipment	coverage is important
Sweet Corn	Armyworm	250 ml to 375 ml	to obtain optimum control.
	Fall armyworm	Apply either by	
		ground or aerial	For corn earworm,
	Beet armyworm	application equipment	European corn borer
			or western bean
	Variegated		cutworm control, time
	cutworm		the applications to
			coincide with peak
	Corn earworm/		egg hatch. Scout by
	Tomato fruitworm		monitoring egg laying and egg hatch to
			determine application
	European corn		timing. Reapply if
	borer		monitoring indicates it
			is necessary.
	Western bean		\$
	cutworm		
			Refer to the section of
			the label titled
			AERIAL
			APPLICATION
			INSTRUCTIONS for
			use information
			specific to aerial application.
		1	application.

# **RESTRICTIONS AND PRECAUTIONS: Corn**

- For pests with a range of application rates, use the high rate under heavy pest pressure.
- Do not make more than 4 applications per season.
- Do not apply more than once every 3 days on seed corn or sweet corn.
- Do not apply more than once every 7 days on field corn or popcorn.
- Do not apply less than 1 day before harvest of seed corn or sweet corn.
- Do not apply less than 14 days before harvest of field corn or popcorn.
- Do not exceed a total of 1.125 litres CORAGEN® insecticide per ha per season.
- Do not make a foliar application of CORAGEN® insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed or seed pieces treated with any Group 28 insecticide.

### CEREAL GRAINS – Crop Group 15 (EXCEPT CORN AND WILD RICE) and CEREALS for FORAGE – Crop Group 16 (EXCEPT CORN AND WILD RICE)

**Spray Volume for Cereal Grains:** Apply in a minimum finished spray volume of 100 L/ha by ground. Apply in a minimum finished spray volume of 50 L/ha by air

SITE	PEST	RATE CORAGEN® insecticide / ha	SPECIFIC DIRECTIONS
CEREAL GRAINS Barley,	Grasshoppers	125 mL to 250 mL	Begin applications when treatment thresholds have been
Buckwheat, Millet, pearl	Cutworms	250 mL	reached. Thorough coverage is important
Millet, proso, Oats, Rye, Sorghum, Teosinte,	Armyworm Fall armyworm Beet armyworm	250 mL to 375 mL	to obtain optimum control.
Triticale Wheat	Corn earworm		
	borer		

#### **RESTRICTIONS AND PRECAUTIONS: Cereal Grains**

- Forage, Fodder and hay may be fed to livestock
- Do not make more than 3 applications per season.
- Do not apply more than once every 7 days.
- Do not apply less than 1 day before harvest. Observe a 1-day PHI
- Do not exceed a total of 1.125 litres CORAGEN® insecticide per ha per season
- For pests with a range of application rates, use the high rate under heavy pest pressure.
- Do not make a foliar application of CORAGEN® insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed or seed pieces treated with any Group 28 insecticide.

# **GRASS FORAGE, FODDER, AND HAY GROUP – Crop Group 17**

**Spray Volume for Grass Forage, Fodder, and Hay Group:** Apply in a minimum finished spray volume of 100 L/ha by ground.

SITE	PEST	RATE CORAGEN® insecticide / ha	SPECIFIC DIRECTIONS
GRASS FORAGE FODDER AND HAY GROUP (Any grass,	Grasshoppers	125 mL to 250 mL	Begin applications when treatment thresholds have been
Gramineae family (either green or cured) except sugarcane and those included in the cereal grains group, that will be fed to or grazed by livestock, all pasture and range grasses and grasses grown for hay or silage	Armyworm Fall armyworm Beet armyworm Corn earworm	250 mL to 375 mL	reached. Thorough coverage is important to obtain optimum control.

# **RESTRICTIONS AND PRECAUTIONS: Grass Forage, Fodder, and Hay Group**

- For any of the pests listed above, use the high rate under heavy pest pressure.
- Do not make more than 4 applications per season.
- Do not apply more than once every 7 days.
- Observe a 0-day PHI.
- Do not exceed a total of 1.125 litres CORAGEN® insecticide per ha per season.
- Do not make a foliar application of CORAGEN® insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed or seed pieces treated with any Group 28 insecticide.

# NON-GRASS ANIMAL FEEDS GROUP – Crop Group 18

**Spray Volume for Non-Grass Animal Feeds Group:** Apply in a minimum finished spray volume of 100 L/ha by ground.

SITE	PEST	RATE CORAGEN® insecticide / ha	SPECIFIC DIRECTIONS
NON-GRASS ANIMAL FEEDS GROUP	Grasshoppers	125 mL to 250 mL	Begin applications when treatment
Alfalfa; Bean, velvet; Clover (Trifolium,	Beet armyworm	250 ml to 375 ml	thresholds have been reached. Thorough coverage is important

Melilotus);	Alfalfa weevil	375 ml to 500 ml	to obtain optimum
Kudzu;	(suppression only)		control.
Lespedeza;			
Lupin;			
Sainfoin;			
Trefoil;			
Vetch;			
Vetch, crown;			
Vetch, milk			

# **RESTRICTIONS AND PRECAUTIONS: Non-Grass Animal Feeds Group**

- For either of the pests listed above, use the high rate under heavy pest pressure.
- Do not make more than 1 application per cutting.
- Observe a 0-day PHI.
- Do not make a foliar application of CORAGEN® insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed or seed pieces treated with any Group 28 insecticide.

# OILSEEDS GROUP – Crop Group 20

**Spray volume for Oilseeds Group:** Apply a minimum finished spray volume of 100 L/ha by ground. Apply a minimum finished spray volume of 50 L/ha by air.

SITE	PEST	RATE DUPOMT™ CORAGEN® Insecticide /ha	SPECIFIC DIRECTIONS
OILSEEDS GROUP	Diamondback moth	125	Begin applications when treatment
Canola Rape Seed;	Grasshoppers	125 - 250	thresholds have been reached. Thorough
Mustard seed; Flax; Linseed; Sunflower seed;	Bertha armyworm	125 to 375	coverage is important to obtain optimum control.
Safflower; Borage;	Cabbage looper	250	
Calendula; Crambe; Cuphea; Echium; Euphorbia; Evening Primrose; Gold of Pleasure;	Imported cabbage worm Swede midge Cutworms		
Hare's ear mustard; Lesquerella;			
Lunaria;		250 to 375	
Meadowfoam; Milkweed;	Sunflower head moth		
Niger seed; Oil radish; Poppy seed; Rose hip; Stokes aster;	Reduces damage caused by banded sunflower moth.		
Sweet rocket; Tea oil plant;			

# **RESTRICTIONS AND PRECAUTIONS: Oilseeds**

- Do not make more than 3 applications per season.
- Do not apply more than once every 5 days.
- Do not apply less than 1 day before harvest. Observe a 1-day PHI
- Do not exceed a total of 1.125 litres CORAGEN® insecticide per ha per season
- Do not make a foliar application of CORAGEN® insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed or seed pieces treated with any Group 28 insecticide.

### MINT

Spray Volume for Mint: Apply in a minimum finished spray volume of 100 L/ha by ground.

SITE	PEST	RATE CORAGEN® insecticide / ha	SPECIFIC DIRECTIONS
MINT	Cabbage looper	250 ml	Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain optimum control.

### **RESTRICTIONS AND PRECAUTIONS: Mint**

- Do not make more than 4 applications per season.
- Do not apply more than once every 14 days.
- Do not apply less than 3 days before harvest. Observe a 3-day PHI.
- Do not exceed a total of 1 litre CORAGEN® insecticide per ha per season.
- Do not make a foliar application of CORAGEN® insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed or seed pieces treated with any Group 28 insecticide.

# OKRA

Spray Volume for Okra: Apply in a minimum finished spray volume of 100 L/ha by ground.

SITE	PEST	RATE CORAGEN® insecticide / ha	SPECIFIC DIRECTIONS
OKRA	Beet armyworm Corn earworm	250 ml to 375 ml	Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain optimum control.

# **RESTRICTIONS AND PRECAUTIONS: Okra**

- For either of the pests listed above, use the high rate under heavy pest pressure.
- Do not make more than 4 applications per season.
- Do not apply more than once every 5 days.
- Do not apply less than 1 day before harvest. Observe a 1-day PHI.
- Do not exceed a total of 1.125 litres CORAGEN® insecticide per ha per season.
- Do not make a foliar application of CORAGEN® insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed or seed pieces treated with any Group 28 insecticide.

### HOPS

Spray Volume for Hops: Apply in a minimum finished spray volume of 100 L/ha by ground.

SITE	PEST	RATE CORAGEN® Insecticide/HA	SPECIFIC DIRECTIONS
Hops	Cutworms Armyworm	250 to 375 ml	Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain optimum control.
	Cabbage looper	250 mL	

#### **RESTRICTIONS AND PRECAUTIONS: Hops**

- Do not make more than 4 applications per season.
- Do not apply more than once every 7 days.
- Do not apply less than 0 day before harvest. Observe a 0 day PHI.
- Do not exceed a total of 1.125 litres of CORAGEN® insecticide per ha per season.
- Do not apply by air.

# NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR SPECIAL USE APPLICATIONS:

The DIRECTIONS FOR USE for this product for the uses described below were developed by persons other than FMC Corporation and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. FMC Corporation itself makes no representation or warranty with respect to product performance (efficacy) or crop tolerance (phytotoxicity) claims for this product when used on the crops listed below. Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold FMC Corporation harmless from any claims based on efficacy or phytotoxicity in connection with these uses.

# FOR USE ON BRASSICA VEGETABLES - Crop Group 5

**Spray Volume for Brassica Vegetables:** Apply in a minimum finished spray volume of 100 L/ha by ground.

SITE	PEST	RATE CORAGEN® insecticide/ ha	SPECIFIC DIRECTIONS
BRASSICA VEGETABLES Broccoli, Broccoli (Chinese), Broccoli raab, Brussels Sprouts, Cabbage, Cabbage (Chinese, bok choy), Cabbage (Chinese, napa), Cabbage (Chinese mustard, choy), Cauliflower, Cavalo broccolo, Collards, Kale,	Swede midge	250 ml For optimum control, apply Hasten NT Spray Adjuvant* at an application rate of 0.25% v/v or MSO Contentrate with Leci- Tech* at an application rate of 0.5% v/v.	<ul> <li>Begin applications when treatment thresholds have been reached.</li> <li>Thorough coverage is important to obtain optimum control.</li> <li>Monitor Swede midge activity every 2-4 days using Jackson traps baited with pheromone lures.</li> <li>Follow local threshold. Apply CORAGEN® insecticide as soon as possible once the Swede midge threshold is reached. Applications on cabbage, Chinese cabbage (napa), cauliflower and Chinese broccoli (gai lon) must be made early in the growing season, before heads start to form.</li> </ul>
Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens			Given that there are multiple generations of Swede midge, several applications of insecticide (to a maximum of 4 per season) will likely be required.

#### **RESTRICTIONS AND PRECAUTIONS: Brassica Vegetables**

- Do not make more than 4 applications per season.
- Do not apply more than once every 3 days. For swede midge, make additional applications when monitoring indicates they are necessary, according to local thresholds.
- Do not apply less than 3 days before harvest. Observe a 3-day PHI.
- Do not exceed a total of 1 litre of CORAGEN® insecticide per ha per season.
- Do not apply by air.
- Do not make a foliar application of CORAGEN® insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed or seed pieces treated with any Group 28 insecticide.

**Spray Volume for Globe Artichoke:** Apply in a minimum finished spray volume of 100 L/ha by ground.

ground.			
SITE	PEST	RATE CORAGEN® Insecticide/HA	SPECIFIC DIRECTIONS
Globe Artichoke	Cutworms Armyworm	250 to 375 ml	Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain optimum control.
	Cabbage looper	250 mL	

# **RESTRICTIONS AND PRECAUTIONS: Artichokes**

- Do not make more than 4 applications per season.
- Do not apply more than once every 7 days.
- Do not apply less than 3 day before harvest. Observe a 3-day PHI.
- Do not exceed a total of 1.125 litres of CORAGEN® insecticide per ha per season.
- Do not apply by air.
- Do not make a foliar application of CORAGEN® insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed or seed pieces treated with any Group 28 insecticide.

# FOR USE ON GREENHOUSE CUCUMBERS, GREENHOUSE PEPPERS, GREENHOUSE EGGPLANTS, AND GREENHOUSE TOMATOES

**Spray Volume for Greenhouse Vegetables:** For greenhouse tomatoes, the maximum finished spray volume is 1400 L/ha. For greenhouse cucumbers, greenhouse eggplants, and greenhouse peppers, the maximum finished spray volume is 2000 L/ha.

SITE	PEST	RATE CORAGEN® insecticide/1000 L finished spray volume	SPECIFIC DIRECTIONS
GREENHOUSE CUCUMBERS; GREENHOUSE PEPPERS; GREENHOUSE EGGPLANT; GREENHOUSE TOMATOES	Cabbage looper	125 ml	Begin applications when treatment thresholds have been reached. Thorough coverage is required to obtain optimum control. Repeat applications if monitoring indicates it is necessary

# **RESTRICTIONS AND PRECAUTIONS: Greenhouse Vegetables**

- Do not make more than 3 applications per crop cycle.
- Do not apply more than once every 7 days.
- Do not apply less than 1 day before harvest. Observe a 1-day PHI.
- Do not exceed a total of 750 ml of CORAGEN® insecticide per ha per crop cycle.
- Do not allow effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waters.
- Do not make a foliar application of CORAGEN® insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed or seed pieces treated with any Group 28 insecticide.

# FOR USE ON GREENHOUSE PEPPERS, GREENHOUSE EGGPLANTS, AND GREENHOUSE TOMATOES

**Spray Volume for Greenhouse Vegetables:** Apply in a maximum finished spray volume of 1250 L/ha. Please note that the use of this product for control of tomato leafminer is restricted to plant growth stages for which thorough coverage can be achieved by application volumes of 1250 L/ha or less.

SITE	PEST	RATE CORAGEN® insecticide/1000 L finished spray volume	SPECIFIC DIRECTIONS
GREENHOUSE PEPPERS;	Lepidopteran leafminer	200 ml / 1000L	Apply at egg hatch. Reapply if monitoring indicates it is necessary. Thorough coverage is important to
GREENHOUSE EGGPLANT;			obtain optimum control.
GREENHOUSE TOMATOES			

# **RESTRICTIONS AND PRECAUTIONS: Greenhouse Vegetables**

- Do not make more than 3 applications per crop cycle.
- Do not apply more than once every 7 days.
- Do not apply less than 1 day before harvest. Observe a 1-day PHI.
- Do not exceed a total of 750 ml of CORAGEN® insecticide per ha per crop cycle.
- Do not make a foliar application of CORAGEN® insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed or seed pieces treated with any Group 28 insecticide.

# FOR USE ON PEANUTS

Spray Volume for Peanuts: Apply in a minimum finished spray volume of 100 L/ha by ground.

SITE	PEST	RATE	SPECIFIC DIRECTIONS
		CORAGEN®	
		Insecticide/HA	
Peanuts	Armyworms	250 to 375 ml	Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain
	Cutworms		optimum control.

	Corn earworm		
<ul> <li>Do not make m</li> <li>Do not apply by</li> <li>Do not apply m</li> <li>Do not apply le</li> <li>Do not exceed</li> <li>Do not make a following an in with any Grou</li> </ul>	nore than 4 applie y air. hore than once even ss than 1 day be a total of 1.125 I a foliar applicati n-furrow or soil up 28 insecticide ONIONS SUB G	cations per seaso very 7 days. ofore harvest. Obs litres of CORAGE ion of CORAGEN application or p e. GROUP – Crop g	erve a 1-day PHI. N® insecticide per ha per season. I® insecticide for a minimum of 60 days lanting of seed or seed pieces treated
SITE	PEST	RATE CORAGEN® Insecticide/HA	SPECIFIC DIRECTIONS
Green onion sub group Leek, Onion, green Onion, Welsh, tops, Shallot, fresh leaves, Chive, fresh leaves, Chive, Chinese, fresh leaves, Elegans hosta, Fritillaria, Kurrat, Lady's leek, Onion, Beltsville bunching, Onion, fresh, Onion, macrostem,	Cutworms Leek moth (suppression)	250 to 375 ml	Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain optimum control.

# **RESTRICTIONS AND PRECAUTIONS: Green onion sub group**

- Do not make more than 4 applications per season.
- Do not apply by air.
- Do not apply more than once every 5 days.
- Do not apply less than 1 day before harvest. Observe a 1-day PHI.
- Do not exceed a total of 1.125 litres of CORAGEN® insecticide per ha per season.
- Do not make a foliar application of CORAGEN® insecticide for a minimum of 60 days following an in-furrow or soil application or planting of seed or seed pieces treated with any Group 28 insecticide.

FOR USE ON GARDEN AND SUGAR BEETS

100 L /ha hu are und ar EO L /ha hu air

SITE	PEST	RATE CORAGEN® Insecticide/HA	SPECIFIC DIRECTIONS
Sugar beets Garden beets	Beet Webworm	250 to 375 ml	Begin applications when treatment thresholds have been reached. Thorough coverage is important to obtain optimum control.

Spray Volume for Garden Beets and Sugar beets: Apply in a minimum finished spray volume of

- Do not apply more than once every 3 days.
- Do not apply less than 1 day before harvest. Observe a 1-day PHI.
- Do not exceed a total of 1.125 litres of CORAGEN® insecticide per ha per season. Use the high rate under heavy pest pressure.
- Thorough coverage is important to obtain optimum control.

# 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) fine classification. Boom height must be 60 cm or less above the crop or ground.

#### 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 freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

Method of Application	Crop	Buffer zones (meters) required for the protection of				
		Freshwater habitat of		Estuarine/Marine Habitat of		
		depths:		depths:		
		Less than	Greater	Less than 1	Greater than 1	
		1m	than 1 m	m	m	
Field sprayer		1	1	1	0	
	Root and					
	Tuber					
	vegetables,					
	Fruiting					
	vegetables,					
	leafy					
	vegetables,					
	brassica					
	vegetables,					
	Legume					

vegetables,		
cucurbit		
vegetables,		
corn, grass		
forage, fodder,		
and hay, non-		
grass animal		
feeds, mint,		
Oilseeds,		
okra, globe		
artichokes,		
peanuts, green		
onion		
subgroup and		
cereal grains		

# **AERIAL APPLICATION LABEL INSTRUCTIONS**

**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) fine classification. To 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.

Method of Application			Buffer zones (meters) required for the protection of				
			Freshwater habitat of depths:		Estuarine/Marine Habitat of depths:		
			Less than	Greater	Less than 1	Greater than 1	
			1m	than 1 m	m	m	
Aerial	Potato, Corn (field,	Fixed Wing	15	1	1	0	
	pop, seed and sweet), Legume vegetables, Oilseeds and cereal grains, sugar beets and garden beets	Rotary wing	10	1	1	0	

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. 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.

#### Use Precautions for Aerial Application

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 for Aerial Application**

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.

#### Product Specific Precautions for Aerial Application

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-833-362-7722 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

Apply the recommended rate in a minimum spray volume of 50 litres per hectare.

### **MIXING INSTRUCTIONS:**

Spray equipment must be clean and free of previous pesticide deposits before applying CORAGEN® insecticide. Fill spray tank 1/4 to 1/2 full of water. Add CORAGEN® insecticide directly to spray tank. Mix thoroughly to fully disperse the insecticide; once dispersed continued agitation is required. Once the product has been well mixed, add an adjuvant, where applicable, while continuously mixing. Recommendations regarding the use of adjuvants are provided under the Directions for Use Section of this label. Use mechanical or hydraulic means; do not use air agitation. Spray mix should not be stored overnight in spray tank.

# SPRAYER CLEANUP:

Prior to application, start with clean, well maintained application equipment. Immediately following application, thoroughly clean all spray equipment to reduce the risk of forming hardened deposits which might become difficult to remove.

Drain spray equipment. Thoroughly rinse sprayer and flush hoses, boom and nozzles with clean water. Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment. Do not clean near wells, water sources or desirable vegetation. Dispose of waste rinse water in accordance with local regulations.

#### PRECAUTIONS:

- KEEP OUT OF REACH OF CHILDREN.
- Wear a long sleeved shirt, long pants and chemical resistant gloves while mixing /loading, applying and during clean up and repair.
- Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables are available, use detergent and hot water. Keep and wash PPE separately from other laundry.
- Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- For agricultural uses, do not enter or allow worker entry into treated areas during the restricted entry interval of 12 hours.

• See the Aerial Application Label Instructions section of this label for additional precautions specific to aerial application.

# ENVIRONMENTAL HAZARDS:

- Toxic to aquatic organisms. 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.
- Chlorantraniliprole is persistent and may carryover. It is recommended that any products containing chlorantraniliprole not be used in areas treated with this product during the previous season.
- The use of this chemical may result in contamination of groundwater particularly in areas where soil is permeable (e.g. sandy soil) and/or the depth to the water table is shallow.
- 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 strip between the treated area and the edge of the water body.
- **DO NOT** apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, and wetlands), estuarine/marine habitats.
- **DO NOT** contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

# **RESISTANCE-MANAGEMENT RECOMMENDATIONS:**

For resistance management, please note that CORAGEN® insecticide contains a Group 28 insecticide. Any insect population may contain individuals naturally resistant to CORAGEN® insecticide and other Group 28 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 are 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 CORAGEN® insecticide or other Group 28 insecticides with different groups that control the same pests.
- Make no more than 2 successive applications per generation 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.
- Use tank mixtures with insecticides from a different group when such use is permitted.
- Insecticide use should be based on an IPM program that includes scouting and record keeping, and considers cultural, biological and other chemical control practices.
- 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 FMC Corporation at 1-833-362-7722.

# STORAGE:

Store product in original container only, away from other pesticides, fertilizer, food or feed. Not for use or storage in or around the home. Keep container closed. To prevent contamination, store this product away from food or feed.

### DISPOSAL:

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.

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.

#### 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 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.

**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.

For medical emergencies call 1-800-331-3148 (24 hours).

**TOXICOLOGICAL INFORMATION:** Treat symptomatically. This product contains a petroleum distillate. Vomiting may cause aspiration pneumonia.

# 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.

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