

Coragen[®] Insect Control Powered by Rynaxypyr[®] active Avaunt[®] Insecticide



FRUITING VEGETABLES

Crop Protection Label Summaries

Category	Coragen [®] insect control	Avaunt [®] insecticide
Common Name	Chlorantraniliprole	Indoxacarb
Chemical Class	Anthranilic diamide (Group 28)	Oxadiazine (Group 22)
Mode of Action	Ryanodine receptor modulator	Sodium channel blocker
Formulation	1.67 SC (soluble concentrate)	30% WDG (water dispersible granule)
EPA Reg No.	352-729	352-597
Signal Word	No signal word	Caution
PPE (personal protective equipment)	Long-sleeved shirt and long pants, shoes plus socks	Long-sleeved shirt and long pants, chemical resistant gloves, shoes plus socks
Insect Pest Activity	Works through ingestion, contact, ovicidal ¹ , ovi-larvicidal, larvicidal and adult ^{2,3} activity	Works through ingestion, contact, ovi-larvicidal and larvicidal activity
Beneficial Arthropods	Minimal impact on beneficial insects when applied at labeled rates — an excellent fit with IPM programs*	Minimal impact on beneficial insects and mites when used in accordance with the label — an excellent fit with IPM programs*
Target Insect Pests	Pests Controlled: beet armyworm, fall armyworm, Southern armyworm, Western yellowstriped armyworm, European corn borer, garden webworm, hornworms, loopers, tomato fruitworm, tomato pinworm, leafminers (larvae), ⁴ silverleaf whiteflies (nymphs) ⁵	Pests Controlled: beet armyworm, Southern armyworm, tomato fruitworm, tomato pinworm, Western yellowstriped armyworm, hornworms, loopers
Application Timing	Time applications to the most susceptible insect pest stage, typically at egg hatch and/or newly hatched larvae, before populations reach damaging levels. For best results, applications should be timed at or before egg deposition.	Time applications to the most susceptible insect pest stage, typically at egg hatch and/or newly hatched larvae, before populations reach damaging levels.
Application Rate	Soil At-Planting: ⁶ an in-furrow spray, transplant water treatment, hill drench, surface band, soil shank injection 3.5–5.0 fl. oz./A — beet armyworm, fall armyworm, loopers, Southern armyworm, tomato fruitworm, tomato pinworm, Western yellowstriped armyworm 5.0–7.5 fl. oz./A — leafminers (larvae), ⁴ silverleaf whiteflies (nymphs) ⁵	Avaunt insecticide is not labeled for soil at-plant applications.



Category

Coragen® insect control

Avaunt® insecticide

Application Rate	<p>Drip Chemigation:⁶ 3.5–5.0 fl. oz./A — beet armyworm, Colorado potato beetle, European corn borer, fall armyworm, garden webworm, hornworms, loopers, Southern armyworm, tomato fruitworm, tomato pinworm, Western yellowstriped armyworm</p> <p>5.0–7.5 fl. oz./A — leafminers (larvae),⁴ silverleaf whiteflies (nymphs)⁵</p> <p>Foliar Application: 2.0–5.0 fl. oz./A — hornworms</p> <p>3.5–5.0 fl. oz./A — beet armyworm, Colorado potato beetle, European corn borer, fall armyworm, garden webworm, loopers, Southern armyworm, tomato fruitworm, tomato pinworm, Western yellowstriped armyworm</p> <p>5.0–7.5 fl. oz./A — leafminers (larvae),⁴ silverleaf whiteflies (nymphs)⁵</p>	Avaunt insecticide is not labeled for drip chemigation.
REI (restricted entry interval)	4-hour REI	12-hour REI
PHI (preharvest interval)	1-day PHI	3-day PHI
Rainfastness	When spray dries (translaminar)	2 hours (moderately translaminar)
Minimum Interval Between Treatments	5 days — Foliar application 10 days — Drip chemigation	5 days — Foliar application
Maximum Product per Season	Do not apply more than 15.4 fl. oz./A Coragen insect control or 0.2 lb. active ingredient of chlorantraniliprole-containing products per acre per crop per season.	Do not apply more than 14 oz. Avaunt insecticide (0.26 lb. active ingredient) per acre per crop.
Maximum Number of Applications per Season	Make no more than four applications per acre per crop season.	Not applicable
Spray Coverage	Thorough spray coverage is essential for best performance. Use a minimum of 10 GPA by ground or 5 GPA by air.	Apply in sufficient water to obtain thorough coverage of foliage. Use a minimum of 10 GPA by ground or 5 GPA by air.
Spray Tank Stability	Stable under a wide range of pH (1–9)	Stable under a wide range of pH (5–9)
Spray Adjuvants	Penetrating spray adjuvants are preferred in most situations. Sticker-type spray adjuvants are not recommended with Coragen insect control.	For best results, use a spray adjuvant to help increase coverage, penetration and performance of Avaunt insecticide.
Bee Statement	No bee statement on label or use restrictions around bees.*	This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are foraging in the treatment area.
Resistance Management	Make no more than two successive applications of Coragen insect control or other Group 28 products within a single generation of the target pest on a crop or within a 30-day period to the same insect species on a crop. Following a “Group 28 treatment window,” rotate to a treatment window of effective products with a different mode of action. This “non-Group 28 window” should approximate the duration of one generation of the target pest. Target the most susceptible insect life stages whenever possible.	Make no more than two successive applications per generation or within a 30 day period to the same insect species on a crop. The following application(s) to the target pest in the next generation must be with an effective product with a different mode of action (non-Group 22 insecticide).
Packaging	8 x 1 qt. bottles/case = gal./case on all 48 cases/pallet = 96 gal./pallet; 4 x 1 gal. jugs/case = 4.0 gal./case, 36 cases/pallet = 144 gal./pallet	10 x 18 oz. jugs/case = 180 oz./case, 36 cases/pallet = 6,480 oz./pallet

¹ Significant ovicidal activity is observed at varying levels depending on the pest species.

² Disruption of adult insect behaviors in some pest species e.g., tomato fruitworm: mate finding, mating, oviposition, feeding, locomotion and orientation.

³ Adult mortality is species, application rate, exposure level, and time dependent based on lab and field studies e.g., beet armyworm, corn earworm, navel orangeworm.

⁴ Control of *Liriomyza* species, suppression of *L. huidabrensis* and *L. langaei*.

⁵ Suppression only. Use in conjunction with effective adult whitefly control program.

⁶ Soil applications of Coragen insect control (an in-furrow spray at planting, transplant water treatment, hill drench at planting, surface band at planting, soil shank injection at planting, or drip irrigation). Coragen insect control must be applied uniformly in the root zone or poor performance will result. Surface band application requires sufficient overhead watering to ensure the treatment is moved into the root zone.

* In line with integrated pest management and good agricultural practices, insecticide applications should be made when pollinators are not foraging to avoid unnecessary exposure.

Do not apply more than 7.5 fl. oz./A (0.098 lb. ai/A) of Coragen insect control to the soil at planting.

Do not apply more than 10 fl. oz./A (0.132 lb. ai/A) of Coragen insect control per crop season by any combination of at plant soil application and drip chemigation. For drip chemigation applications made in the second half of the crop growing cycle, translocation of Coragen insect control into aerial portions of the plant may take up to 7 to 10 days.

Do not make more than two drip chemigation applications of Coragen insect control per crop.

Do not make more than one drip chemigation application of Coragen insect control per crop if an at-plant application of Coragen insect control was made.

Refer to the Soil Application section of the Coragen insect control label for additional guidance. See the rate conversion chart for application rate per 1,000 linear feet.

Integrated Pest Management: FMC supports the use of Integrated Pest Management (IPM) programs to control pests in fruiting vegetable crops. Coragen insect control (Group 28) and Avaunt insecticide (Group 22) may be used as part of an IPM program, which can include biological, cultural, and genetic practices, aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, rotation of insecticides with different modes of action, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop or site systems in your area.

Always read and follow label directions and precautions for use. Some products may not be registered for sale or use in all states. As of November 1, 2017, the USEPA registrations for DuPont™ Avaunt® insecticide, Coragen® insect control and Rynaxypyr® active were sold to FMC by DuPont. FMC, Avaunt, Coragen and Rynaxypyr are trademarks of FMC Corporation or an affiliate. ©2018 FMC Corporation. All rights reserved. 18-FMC-0293 04/18

