Altacor® Insect Control Powered By **Rynaxypyr®**
Avaunt® Insecticide

Crop Protection Label Summaries

GRAPES

Category	Altacor® insect control	Avaunt® insecticide
Common Name	Chlorantraniliprole	Indoxacarb
Chemical Class	Anthranilic diamide (Group 28)	Oxadiazine (Group 22)
Mode of Action	Ryanodine receptor activator	Sodium channel blocker
Formulation	35% WDG (water dispersible granule)	30% WDG (water dispersible granule)
EPA Reg No.	352–730	352–597
Label 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 and larvicidal activity (adult response[2] with some target pests)	Works through ingestion, contact, ovi-larvicidal and larvicidal activity
Beneficial Arthropods	Helps conserve certain beneficials (predators, parasites and pollinators)	Helps conserve certain beneficials (predators and parasites)
Target Insect Pests	**Pests Controlled:** climbing cutworms, grape leaffolders, omnivorous leafrollers, Western grapeleaf skeletonizers, European grapevine moths, light brown apple moths, raisin moths, katydid[3] nymphs	**Pests Controlled:** grape leaffolders, omnivorous leafrollers, Western grapeleaf skeletonizers, European grapevine moths, light brown apple moths, katydid[3] nymphs **Pests Suppressed:** leafhoppers
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.

FMC

Category	Altacor® insect control	Avaunt® insecticide
Application Rate	**Altacor insect control labeled rates by grape pest:** **2.0–4.5 oz./A** — grape leaffolders **3.0–4.5 oz./A** — climbing cutworms, Western grapeleaf skeletonizers **2.5–4.5 oz./A** — omnivorous leafrollers **3.0–4.5 oz./A** — European grapevine moths, light brown apple moths, raisin moths, katydid[3] nymphs	**Avaunt insecticide labeled rates by grape pest:** **3.5–6.0 oz./A** — Western grapeleaf skeletonizers, grape leaffolders **5.0–6.0 oz./A** — leafhoppers (suppression) **5.0–6.0 oz./A** — omnivorous leafrollers (3.5–5.0 oz./A for suppression of OLR) **5.0–6.0 oz./A** — European grapevine moths, light brown apple moths **6.0 oz./A** — katydid[3] nymphs
REI (restricted entry interval)	four-hour REI	12-hour REI
PHI (preharvest interval)	14-day PHI — grapes	seven-day PHI — grapes
Rainfastness	When spray dries (translaminar)	When spray dries (moderately translaminar)
Minimum Interval Between Treatments	7 days	21 days
Maximum Product per Season	Do not apply more than 9 oz. Altacor insect control or 0.2 lb. ai of chlorantraniliprole-containing products per acre per crop per season.	Do not apply more than 12 oz. Avaunt insecticide (0.22 lb. ai) per acre per crop.
Maximum Number of Applications per Season	Make no more than four applications per season in grapes.	Make no more than two applications per season in grapes.
Methods of Application	Foliar applications (ground, aerial)	Foliar applications (ground, aerial)
Spray Coverage	Thorough spray coverage is essential for best performance. For best results apply 100–150 GPA. Use a minimum of 30 GPA by ground or 10 GPA by air.	Apply in sufficient water to obtain thorough coverage of foliage. Use a minimum of 50 GPA by ground or 10 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.	For best results, use a spray adjuvant to help increase coverage, penetration and thus performance.
Bee Statement	No bee label restrictions in line with IPM and good agricultural practices insecticide applications should be made when pollinators are not foraging to avoid unnecessary exposure.	Do not apply while bees are actively visiting the treatment area. Low impact to bees once spray has dried.
Resistance Management	Make no more than three successive applications of Altacor insect control (chlorantraniliprole) or other Group 28 products per generation to the same insect species on a crop. Subsequent application(s) to the target pest in the next generation must be with an effective product with a different mode of action i.e., a non-Group 28 insecticide.	Make no more than two successive applications of Avaunt® insecticide (indoxacarb) or other Group 22 products per generation to the same insect species on a crop. Subsequent application(s) to the target pest in the next generation must be with an effective product with a different mode of action i.e., a non-Group 22 insecticide.
Packaging	8 x 40 oz. jugs/case = 320 oz./case, 18 cases per pallet = 5,760 oz./pallet	10 x 18 oz. jugs/case = 180 oz./case, 36 cases per pallet = 6,480 oz./pallet

Integrated Pest Management: FMC supports the use of Integrated Pest Management (IPM) programs to control pests. These products 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.

[1] Significant ovicidal activity is observed at varying levels depending on pest species.
[2] Disruption of adult insect behaviors in some pest species (e.g., tomato fruitworms): mate finding, mating, oviposition, feeding.
[3] Fork-tailed katydids (Scudderia furcata) angular-winged katydids (Microcentrum retinerve).
This reference guide is not intended as a substitute for the product label for the product(s) referenced herein. Product labels for the above product(s) contain important precautions, directions for use, and product warranty and liability limitations, which must be read before using the product(s). Applicators must be in possession of the product label(s) at the time of application.

FMC