

USE PLANT PROTECTION PRODUCTS SAFELY AND WITH RESPONSIBLE CARE. PLEASE ALWAYS FOLLOW THE LABEL WHEN APPLYING PLANT PROTECTION PRODUCTS.

## **ALTACOR® INSECT CONTROL AT A GLANCE**

Registration No.	L8467 Act No. 36 of 1947
Active ingredients	Rynaxypyr® active ingredient* 350 g/kg
Chemical class	IRAC group 28 - Anthranilic diamide
Crops	Pome fruit: Apples and Pears Stone fruit: Peaches, Plums and Nectarines Grapes (Table) and Tree Nuts
Target pests	Codling moth (larvae) - <i>Cydia pomonella</i> African bollworm (larvae) - <i>Helicoverpa armigera</i> False Codling moth (larvae) - <i>Thaumatotibia leucotreta</i> Oriental Fruit moth (OFM) (larvae) - <i>Grapholita molesta</i>
Use rate by application	10 - 12 g/100 ℓ
Number of treatments	Pome fruit: Max. 3 applications per season Stone fruit: Max. 2 applications per season Grapes (Table): Max. 2 applications per season Tree Nuts: Max. 2 applications per season
Application time	Early stages (egg-laying to egg hatching, depending on insect targets), residual efficacy 14 to 21 days (depending on local conditions)
Pre-harvest interval	Pome fruit: 14 days, Stone fruit: 14 days, Grapes (Table): 3 days, Tree Nuts: 10 days
Packaging	500 g

 $<sup>^{\</sup>star}$  Rynaxypyr  $^{\!\scriptscriptstyle{(\!0\!)}}$  active ingredient is the trademark of chlorantraniliprole.

### **OUTSTANDING EFFICACY**

Altacor® insect control is the supreme choice to protect against *Cydia pomonella* (codling moth) and *Helicoverpa armigera* (African bollworm) in apples and pears. The foliar applied broad spectrum insecticide provides high efficacy and long lasting protection. Because of its unique, innovative mode of action, Altacor® insect control is equally effective against difficult to control insect pest populations.

In comparison with other currently available insecticides, Altacor® insect control has a higher biological activity. Altacor® insect control works quickly and is highly effective at low use rates. It has a wide spectrum of activity against a number of the principal chewing insects attacking crops.

The formulation shows exemplary safety for an array of crops under a variety of environmental conditions. Altacor® insect control displays excellent mixing and handling characteristics, as well as compatibility with all insecticides and fungicides tested to date. While highly potent to target species, Altacor® insect control has minimal impact on beneficial insects and therefore is outstandingly suitable for Integrated Pest Management programmes, when used as directed. The very low mammalian toxicity of the product allows immediate re-entry after spray solution has dried and has minimal impact on field operations.

Altacor® gives outstanding control of *Cydia* pomonella even under very high pressure.



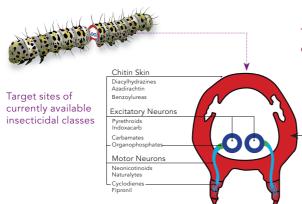
Codling Moth trial Villiersdorp

% Fruit damaged

80
70
60
50
40
30
20
Altacor® Altacor® Standard Untreated (Ax concentrate application)

### **MODE OF ACTION**

Rynaxypyr® active ingredient targets the insects' ryanodine receptors and activates an uncontrolled release of calcium from internal stores into the cytoplasm of muscle fibres. This unique Mode of Action (MoA) makes Altacor® insect control an excellent partner in Insect Resistance Management (IRM) programmes.



The unique MoA makes Altacor® insect control highly effective against the main Lepidoptera pests.

Target site of Altacor® insect control

Muscle Fibers

Rynaxypyr® active ingredient

GROUP 28 INSECTICIDE

Insecticidal classes according to the Insecticide Resistance Action Committee (IRAC), a specialist technical group of the industry association, CropLife. This association provides a coordinated industry response to prevent or delay the development of resistance in insect and mite pests.

### HIGHLY EFFECTIVE MODE OF ACTION

Altacor® insect control is active against various growth stages in the insect's lifecycle such as:

- Eggs (true ovicidal effect on certain pests).
- Larvae during, or just after hatching (ovi-larvicidal).
- Larvae through contact with spray deposits when moving over treated plant parts.
- Larvae by ingestion during first feeding attempts.
- Adult moths (reduction in egg laying).

All these components normally overlap and contributes to the strong and sound efficacy of Altacor® insect control.



### **EXCELLENT IPM COMPATIBILITY**

Thanks to the selective MoA of Altacor® insect control on the insect's ryanodine receptor, it has minimal effect on non-target organisms such as mammals, fish, birds and beneficial arthropods. When applied according to label recommendations, Altacor® insect control conserves pollinators, predators and parasitoids. In addition, the application of Altacor® insect control doesn't usually lead to an outbreak of spider mites (*Tetranychus urticae*) as often happens when other non-selective insecticides are applied. Hence, Altacor® insect control contributes to maintaining the ecological balance between this secondary pest and its natural enemies.

#### ALTACOR® INSECT CONTROL IS SELECTIVE TO IMPORTANT BENEFICIALS

Group	Species
Predators	Amblyseius andersoni, Kampimodromus aberrans, Adalia bipunctata, Coccinella septempunctata, Coccinellids, Forficulida auricularia, Episyrphus balteatus, Anthocoris nemoralis, Orius insidiosus, Chrysoperla carnea
Parasitoids	Ageniaspis citricola, Aphelinus mali, Aphidius rhopalosiphi
Pollinators	Apis mellifera, Bombus terrestris

### **RESISTANCE MANAGEMENT**

According to the IRAC International mode of action classification scheme (www.irac-online.org), Altacor® insect control component belongs to GROUP 28 INSECTICIDE

For sustainable use of Altacor®, a good resistance management is essential. Guidelines to be considered:

# GOOD AGRICULTURAL PRACTICE

Follow the label instructions and carefully check the number of applications registered for a product in a crop per year.

Don't reduce rates, follow the recommended application timing and spray volume.

### INTEGRATED PEST MANAGEMENT

- 1. Farming methods to limit weed, disease and pest damage
- 2. Tracking in the field or any other detection method
- 3. Pest identification
- 4. Population monitoring
- 5. Alternating insecticides with different modes of action



### **SAFE USE**

Safety is a priority at FMC, and we encourage farmers and other workers to use our products with care. We recommend that they:

- Reduce potential user exposure through improved application techniques;
- Reduce dermal and inhalation exposures by the proper use of appropriate Personal Protective Equipment (PPE);
- Reduce any environmental impact with effective container rinsing, correct disposal and avoidance of surpluses.

# GOOD PLANT PROTECTION PRACTICE 10 RESPONSIBLE AND PROFESSIONAL ACTIONS

### **BEFORE APPLICATION**



1 Store products in a suitable and locked store.



 $oldsymbol{2}$  Read all safety precautions and directions for use before use.



Protect yourself properly (protective gloves, glasses, mask, coveralls, boots).



Regularly check all equipment and keep it well-maintained and calibrated.



Check the filling of the spray tank and adjust the spray volume (check valves, avoid overfilling). Do not mix a volume of spray solution greater than is required for immediate use.



Triple-rinse the pesticide container, and add the rinsate to the spray tank, or use an induction bowl.

### **DURING APPLICATION**



Do not apply to watercourses or ditches. Apply to the crop in calm weather conditions, with no more than a light breeze, to avoid spray drift to ditches, watercourses, roads, neighbouring farms or buildings.

### AFTER APPLICATION



Dilute unavoidable residue in the spray tank with water and spray onto a treated area.



Clean re-usable personal protective equipment. Wash your hands. Take a shower.



O Dispose of empty containers in accordance with the official local regulations. Recycle where possible.

For more information please contact:

FMC Chemicals (Pty) Ltd PO Box 44, Postnet Menlyn Waterkloof Glen, 0181 Republic of South Africa. Tel: +27 12 003 2938.

Altacor® contains chlorantraniliprole (anthranilic diamide) (Rynaxypyr®) Reg. No. L8467 Act No. 36 of 1947, caution. Altacor® and Rynaxypyr® are trademarks of FMC Corporation or an affiliate. Date: 08/2020.