



The miracles of science®

DuPont™ Altacor® insecticide

Technical Information

Active Constituent:
350 g/kg CHLORANTRANILIPROLE

Pack Sizes:
5 kg

GROUP	28	INSECTICIDE
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READ SAFETY DIRECTIONS BEFORE OPENING OR USING

For the control of Lepidopteran species of insect pests in Cotton, as per the Directions for Use

SAFETY DIRECTIONS

May irritate eyes. Avoid contact with eyes.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

MATERIAL SAFETY DATA SHEET

For further information refer to the Material Safety Data Sheet.

GENERAL INSTRUCTIONS

DuPont™ Altacor® insecticide is an anthranilic diamide insecticide in the form of a water dispersible granule. Altacor® is particularly active on Lepidopteran insect pests, primarily as a larvicide.

DuPont™ Altacor® should be applied after careful field monitoring of pest populations of eggs and larvae to determine the need for application, the correct timing of the initial application and of any subsequent applications. Subsequent applications are dependent on economic thresholds, as well as the growth rate of new unprotected cotton terminals.

For *Helicoverpa* species, spray applications should be timed to coincide with egg hatching and before larvae are entrenched in protected feeding sites.

DuPont™ Altacor® has been specifically designed for use in Integrated Pest Management (IPM) schemes. DuPont™ Altacor® enters larvae primarily by ingestion of treated foliage, or through penetration of the insect cuticle. **After ingesting Altacor®, the larvae cease feeding and die four to five days later.** Altacor® does not give traditional larval “knockdown” control, but controls nominated larvae species giving superior square, flower and boll protection in cotton.

INSECTICIDE RESISTANCE WARNING

GROUP	28	INSECTICIDE
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For insecticide resistance management DuPont™ Altacor® insecticide is a Group 28 insecticide.

Some naturally occurring insect biotypes resistant to Altacor® insecticide and other Group 28 insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Altacor® insecticide and other Group 28 insecticides are used repeatedly. The effectiveness of Altacor® insecticide on resistant

individuals could be significantly reduced. Since the occurrence of resistant individuals is difficult to detect prior to use DuPont accepts no liability for any losses that may result from the failure of Altacor® insecticide to control resistant insects.

Strategies to minimise the risk of insecticide resistance are available. To help prevent the development of resistance to Altacor® insecticide observe the following instructions:

- Use Altacor® insecticide in accordance with the current Insecticide Resistance Management (IRM) strategy for your region.
- Cultivate all cotton fields as soon as possible after picking to destroy over-wintering pupae of *Helicoverpa armigera*.

For further information contact your farm chemical supplier, consultant, local Department of Agriculture or Primary Industries, or local DuPont Representative.

MIXING

Fill spray tank to ¼ to ½ full of water. Measure the amount of Altacor® insecticide required for the area to be sprayed. Add Altacor® insecticide directly to the spray tank with the agitation engaged. Mix thoroughly to disperse the insecticide. Once dispersed, the material must be kept in suspension at all times by continuous agitation. Use mechanical or hydraulic means, **DO NOT** use air agitation, premix or slurry.

If spray solution is left standing, ensure thorough re-agitation of the spray mix until fully resuspended. **DO NOT** allow spray mix to sit overnight, as resuspension may be difficult.

SURFACTANTS

Use a non-ionic surfactant/wetting agent at 125 g active/100 L, (e.g. BS1000* @ 125 mL/100 L).

DO NOT add a non-ionic surfactant/wetting agent if:

- mixing with another product which already contains a surfactant and/or the product label advises not to add a surfactant.
- mixing with a liquid fertiliser

APPLICATION

Application equipment should be calibrated to apply at least sixty (60) droplets per cm² of target foliage. Droplet VMD should be of medium spray quality according to ASAE S572 definition for standard nozzles.

DO NOT apply when wind speed is less than 3 or more than 20 kilometres per hour at the application site.

DO NOT apply where there are aquatic and wetland areas including aquacultural ponds or surface streams and rivers downwind from the application area and within the mandatory no-spray zone shown in the following table.

FOR AERIAL APPLICATION				
Usage	Applications per season	Spray quality	Wind speed conditions	Downwind No-Spray Zone
Cotton	3	Medium	3 - 8 km/h	100 metres
			8 - 14 km/h	200 metres
			15 - 20 km/h	400 metres
FOR GROUND APPLICATION				
Usage	Applications per season			Downwind No-Spray Zone
Cotton	3			20 metres

Ground application

Apply as a *blanket* spray or as a *banded* spray. Ensure thorough spray coverage on the foliage, using appropriate fan nozzles. Apply in a minimum spray volume of 100 L/ha and keep the boom low to avoid spray drift. A minimum spray pressure of 275 kPa (40 psi) should be used with fan nozzles applying insecticides. **Higher pressure reduces droplet size, DOES NOT improve canopy penetration and may increase drift potential.** WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE. For band spraying, increase the number of fan nozzles per crop row as the plant size increases.

Aerial application

DuPont™ Altacor® must only be applied with aircraft fitted with accurately calibrated equipment. Apply a minimum total spray volume of 30 L/ha with with nozzles (e.g. Micronaire rotary atomisers, CP nozzles or conventional hydraulic nozzles) set to medium spray quality according to ASAE S572 definition for standard nozzles. A spray drift minimisation strategy, should be employed at all times when applying this product. **DO NOT apply Altacor® insecticide using Ultra Low Volume (ULV) methods.**

Compatibility

Since formulations may be changed and new ones introduced, it is recommended that users premix a small quantity of the desired tank mix and observe possible adverse changes (settling out, flocculation etc). Avoid complex tank mixtures of several products or very concentrated spray mixtures. DuPont™ Altacor® is compatible with Ovasyn* (amitraz) and Pix* (mepiquat chloride). DuPont™ Altacor® is not compatible with Ultra Low Volume (ULV) formulations.

DIRECTIONS FOR USE

Spray Equipment Cleanout

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.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Dangerous to aquatic invertebrates. Drift and run off from treated areas may be hazardous to aquatic organisms in neighbouring areas. **DO NOT** contaminate streams, rivers or waterways with the chemical or used containers.

DO NOT apply under weather conditions, or from spraying equipment, that may cause spray to drift onto near-by non-target plants/crops, cropping lands or pastures.

Risk to non-target insects - Chlorantraniliprole may have adverse effects on some non-target beneficials, in particular where IPM is practiced, to foliage dwelling predators.

STORAGE AND DISPOSAL

KEEP OUT OF REACH OF CHILDREN.

Store in the closed, original container in a dry, well-ventilated area, as cool as possible out of direct sunlight.

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. **DO NOT** dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should **NOT** be burnt.

PRECAUTION

DO NOT use human flaggers/markers unless they are protected by engineering controls such as vehicles with enclosed cabs.

**IN A MEDICAL EMERGENCY CALL
1800 674 415 All hours**

NOTICE TO BUYER

To the extent permitted by law all conditions and warranties and statutory or other rights of action which buyer or any other user may have against DuPont or Seller are hereby excluded. DuPont hereby gives notice to buyer and other users that it will not accept responsibility for any indirect or consequential loss arising from reliance on product information or advice provided by DuPont or on its behalf unless it is established that such information or advice was provided negligently and that the product has been used strictly as directed. DuPont's liability shall in all circumstances be limited to replacement of the product or a refund of the purchase price paid therefore.

APVMA Approval Number: 61824/0709

RESTRAINTS:

DO NOT apply if heavy dew is present on crops, or if rainfall is expected within 2 hours of application.

DO NOT make more than 3 applications per crop per season, and no more than 2 consecutive sprays per field per season. Applications must be a minimum of 7 days apart.

EXPORT STATEMENT: Import tolerances for produce treated with DuPont™ Altacor® insecticide may be pending in some countries. Consult with your exporter or DuPont before applying Altacor® insecticide to export crops.

For use in all States where appropriate for the crop and/or insect pest.

CROP	PEST	RATE/HA	WHP	CRITICAL COMMENTS
Cotton	Cotton bollworm (<i>Helicoverpa armigera</i>) Native budworm (<i>H. punctigera</i>)	90 or 150 g + non ionic surfactant @ 125 gai/100 L	28 days	Target brown eggs and hatchling (neonates or 1 st instar) to small larvae (2 nd instar) when they reach the economic spray threshold and before they become entrenched in squares, flowers and bolls. Use the low rate on threshold larvae pressure (2 larvae per metre row) and low egg pressure. Use the high rate with high egg and/or larvae pressure (where potential for > 3-5 larvae per metre row produced) and so as to achieve longer residual control of <i>Helicoverpa</i> spp.
	Northern rough bollworm (<i>Earias vittella</i>) Rough bollworm (<i>Earias huegeliana</i>)	150 g + non ionic surfactant @ 125 gai/100 L		Target eggs and hatchling (neonates or 1 st instar) to small larvae (2 nd instar) when they reach the economic spray threshold and before they become entrenched in terminals or bolls.

NOT TO BE USED FOR ANY PURPOSE OR IN ANY MANNER CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

WITHHOLDING PERIODS**HARVEST**

DO NOT HARVEST FOR 28 DAYS AFTER APPLICATION.

GRAZING

DO NOT ALLOW LIVESTOCK TO GRAZE CROPS, COTTON STUBBLE OR GIN TRASH TREATED WITH ALTACOR® INSECTICIDE.

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