



The miracles of science®

DuPont™ Altacor® insecticide

Technical Information

Active Constituent:
350 g/kg CHLORANTRANILIPROLE

Pack Sizes:
720 g

GROUP **28** INSECTICIDE

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

For the control of Lepidopteran species of insect pests in certain fruit crops, 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 that can be obtained from <http://www.cropprotection.dupont.com.au>

GENERAL INSTRUCTIONS

DuPont™ Altacor® insecticide has been specifically designed for use in Integrated Pest Management (IPM) schemes. DuPont™ Altacor® insecticide is an anthranilic diamide insecticide in the form of a water dispersible granule. DuPont™ Altacor® insecticide is particularly active on Lepidopteran insect pests, primarily as a larvicide. Before application monitor insect populations to determine whether or not there is a need for application of Altacor® insecticide based on locally determined economic thresholds. More than one treatment of Altacor® insecticide may be required to control a population of pests.

INSECTICIDE RESISTANCE WARNING

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.

DuPont™ Altacor® insecticide may be subject to specific resistance management strategies. To help prevent the

development of resistance to Altacor® insecticide, use Altacor® in accordance with the current Insecticide Resistance Management (IRM) strategy for your region. 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.

SURFACTANT/WETTING AGENT

Use a non-ionic surfactant/wetting agent at 15 g active/100 L, (e.g. Agral® 600 @ 25 mL/100 L). **DO NOT** use BS1000® or Activator®-90 as it may cause crop phytotoxicity.

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

Minimising Spray Drift

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator must consider all these factors when making application decisions.

The most effective way to reduce drift potential is to apply large droplets (volume mean diameter (VMD) > 250 - 300 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. **APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT MINIMISE DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVOURABLE ENVIRONMENTAL CONDITIONS.** When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

DO NOT apply in orchards or vineyards when wind speed is less than 3 or more than 20 kilometres per hour are measured 15 metres outside of the orchard/vineyard on the upwind side.

DO NOT apply when 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 of 50 metres.

Ground application

Use a sprayer fitted with high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets. Use the lower spray pressures recommended for the nozzle. 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.** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. For orchard/vineyard sprayers avoid directing spray above trees and always turn-off outward pointing nozzles at row ends and outer rows.

Dilute Spraying

- Use a sprayer designed to apply high volumes of water up to the point of run-off and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to the point of runoff. Avoid excessive run-off.
- The required water volume may be determined by applying different test volumes, using different settings on the sprayer, from industry guidelines or expert advice.
- Add the amount of product specified in the Directions for Use table for each 100 L of water. Spray to the point of run-off.
- The required dilute spray volume will change and the sprayer set up and operation may also need to be changed, as the crop grows.
- Always apply sufficient water to cover the crop to the point of runoff, otherwise under dosing will occur and disease control may be inadequate.

Concentrate Spraying

- Use a sprayer designed and set up for concentrate spraying (that is a sprayer which applies water volumes less than

those required to reach the point of run-off) and matched to the crop being sprayed.

- Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen water volume.
- Determine an appropriate dilute spray volume (see Dilute Spraying above) for the crop canopy. This is needed to calculate the concentrate mixing rate.
- The mixing rate for concentrate spraying can then be calculated in the following way:

Example Only

1. Dilute spray volume as determined above: For example 1,500 L/ha
2. Your chosen concentrate spray volume: For example 500 L/ha
3. The concentration factor in this example is : 3 times (i.e. 1,500 L divided by 500 L = 3)
4. If the dilute label rate is 150 g/100 L, then the concentrate rate becomes 3 x 150, that is, 450 g/100 L of concentrate spray.

- The chosen spray volume, amount of product per 100 L of water, and the sprayer set up and operation may need to be changed as the crop grows.
- For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

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. Altacor[®] is compatible with Captan[®], Dextrolac[®], Delan[®], Fulasin[®], Manzate[®] DF[®], Nustar[®], Omite[®], Polyram[®] and Systhane[®].

The mixing sequence recommended is: water soluble bags, dry flowable or water dispersible granules (Altacor[®]), wettable powders, water based suspension concentrates, water soluble concentrates, oil based suspension concentrates, emulsifiable concentrates, adjuvants and surfactants, soluble fertilisers.

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.

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.

**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: 61824/0608

DIRECTIONS FOR USE

RESTRAINTS:

DO NOT apply if rainfall is expected within 2 hours of application.

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/100 L	WHP	CRITICAL COMMENTS
ALL CROPS				
Apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying methods. Refer to Application section of the label. Thorough fruit coverage is essential. Use in accordance with AIRAC Insecticide Resistance Management Strategy guidelines.				
Pome fruit including Apples Nashi Pears Pears	Codling moth <i>(Cydia pomonella)</i> Budworms <i>(Helicoverpa spp.)</i> Oriental fruit moth <i>(Grapholita molesta)</i>	<u>Dilute spraying:</u> 9 g + non ionic surfactant @ 15 gai/100 L <u>Concentrate spraying:</u> Refer to Mixing/ Application section	14 days	DO NOT make more than three (3) applications per crop per season. Codling moth: A maximum of three (3) applications of Altacor® are to be applied at 14 - 21 day intervals commencing at petal fall (or before 110 Degree Days after Codling Moth are detected in traps) until late December. Further treatments should be made with an alternate mode of action insecticide. Or a maximum of three (3) applications can be applied commencing from the end of December at 14 - 21 day intervals following treatments with an alternate mode of action product. Oriental fruit moth: When treating the first generation, apply the initial treatment before 110 Degree Days after Oriental fruit moths are detected in traps. The above programme, when commenced at petal fall, will also control Budworms. Lightbrown apple moth: A maximum of three (3) applications of Altacor® are to be applied at 14 - 21 day intervals commencing at petal fall or apply at 140 Degree Days after Lightbrown apple moths are detected in traps. Further treatments should be made with alternative mode of action insecticides.
	Lightbrown apple moth <i>(Epiphyas postvittana)</i>	<u>Dilute spraying:</u> 9 g + non ionic surfactant @ 15 gai/100 L <u>Concentrate spraying:</u> Refer to Mixing/ Application section		
Stone fruit including Apricot Cherries Nectarines Peaches Plums	Oriental fruit moth <i>(Grapholita molesta)</i>	<u>Dilute spraying:</u> 12 g + non ionic surfactant @ 15 gai/100 L <u>Concentrate spraying:</u> Refer to Mixing/ Application section		DO NOT make more than two (2) applications per crop per season. When treating the first generation, apply the initial treatment before 110 Degree Days after Oriental fruit moths are detected in traps. A maximum of two (2) applications of Altacor® (minimum of 14 days between applications) to each crop. Target sprays against eggs and newly hatched larvae before they become entrenched. Further treatments should be made with alternative mode of action insecticides. A maximum of two (2) applications of Altacor® are to be applied with a minimum spray interval of 14 days commencing at 140 Degree Days after Lightbrown apple moths are detected in traps. Further treatments should be made with alternative mode of action insecticides.
	Lightbrown apple moth <i>(E. postvittana)</i>	<u>Dilute spraying:</u> 9 g + non ionic surfactant @ 15 gai/100 L <u>Concentrate spraying:</u> Refer to Mixing/ Application section		
Grapes	Lightbrown apple moth <i>(E. postvittana)</i> Grapevine moth <i>(Phalaenoides glyciniae)</i>	<u>Dilute spraying:</u> 9 g + non ionic surfactant @ 15 gai/100 L <u>Concentrate spraying:</u> Refer to Mixing/ Application section	8 weeks	DO NOT make more than two (2) applications per crop per season. Applications to be timed for egg hatch (140 Degree Days after a detected moth flight). DO NOT retreat within fourteen (14) days. A final application may be applied up to bunch closure. DO NOT apply after bunch closure. Concentrated spray: DO NOT apply in volumes less than 250 L/ha. This low water volume is dependent on the suitability of concentrated spray application equipment. More reliable application may be gained through increased water volumes.

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

WITHHOLDING PERIODS

HARVEST

POME AND STONE FRUIT: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.

GRAPES: DO NOT HARVEST FOR 8 WEEKS AFTER APPLICATION.

GRAZING – ALL TREATED CROPS

DO NOT GRAZE OR CUT FOR STOCK FOOD.

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