

DELTA-DUO
INSECTICIDE

Active Constituent: 27.5 g/L DELTAMETHRIN
Solvent: 807 g/L LIQUID HYDROCARBONS

GROUP	3A	INSECTICIDE
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DIRECTIONS FOR USE LEAFLET

To be read in conjunction with label affixed to container.

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DIRECTIONS FOR USE

CROP	PEST	STATE	RATE	CRITICAL COMMENTS
Cotton	Native Budworm (H.punctigera), Cotton Bollworm (H.armigera)	Qld, NSW, WA, NT only	700mL/ha	Use when insect reinfestation pressure is high (i.e. moderate to heavy egg laying is occurring and small to medium larvae are present).
			600mL/ha	Use when low to moderate egg laying is occurring and only a few small to very small larvae are present (see note below).
			500mL/ha	Use when egg laying is low and larvae are just about to hatch (see note below).
	Pink Spotted Bollworm	Qld only	500 to 600 mL/ha	Apply at first sign of activity before larvae enter boll. Repeat as necessary.
Maize (corn)	Corn Earworm and Native Budworm (heliiothis)	All States	500mL/ha	Apply at tasselling and before silk emergence when larvae are small (less than 5mm) and before they enter cob. Repeat sprays at 3 to 5 day intervals may be necessary.
Sorghum	Corn Earworm and Native Budworm (heliiothis)	All States	500mL/ha	Apply at first sign of pest, generally from head emergence onward. In tight head varieties, heliiothis may be protected and not readily controlled. Repeat sprays as necessary.
	Sorghum Midge	Vic, SA, WA only	200 to 400 mL/ha	
		Qld, NSW, NT only		Apply at first sign of infestation from head emergence and during flowering. Use rates towards the lower end of the range when infestation is light (1-2 midge/head) for knock-down effect late in the flowering period of sorghum. Use rates towards the higher end of the range when infestation occurs early in the period and/or under heavier infestation levels.
Soybeans, Navy beans, Mung beans.	Corn Earworm and Native Budworm (heliiothis), Looper.	All States	500mL/ha	Inspect crops regularly from early terminal development (4 leaf stage) onwards. Apply before heliiothis or Looper are 5mm long.
	Green Vegetable Bug	Qld, NSW, Tas, SA, WA, NT only		Apply as soon as adult Green Vegetable Bugs are seen, before there is a build up of nymphs.

DIRECTIONS FOR USE (cont)

Sunflower	Corn Earworm and Native Budworm (heliiothis), Rutherglen Bug, Jassids	All States	500mL/ha	Apply at first sign of pest activity. Critical period is from bud stage/face opening onwards. At later growth stages, pests may be partially protected by heads or bracts. Heliiothis should be sprayed before they are 5mm long for best results. Repeat sprays as necessary. If flowering has started and bees are active, application should be deferred until after flowering is complete but before the heads turn down. If treatment is unavoidable during flowering, spraying must take place in the very early morning or very late afternoon.
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NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

Withholding Period (WHP):

Cotton, Maize, Mung Beans, Navy Beans, Sorghum, Sunflowers – DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.

Notes

- Larvae Size** - Larvae greater than 5 mm are often not controlled satisfactorily as they are harder to kill and they are often protected from spray by the plant.

GENERAL INSTRUCTIONS

Insecticide Resistance Warning

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For insecticide resistance management, Delta-Duo Insecticide is a Group 3A Insecticide.

Some naturally occurring insect biotypes resistant to Delta-Duo Insecticide and other Group 3A insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Delta-Duo Insecticide or other Group 3A insecticides are used repeatedly. The effectiveness of Delta-Duo Insecticide on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, ChemAg Pty Ltd accepts no liability for any losses that may result from the failure of t Delta-Duo Insecticide to control resistant insects.

The user should seek advice, and monitor the performance, and if the results are not in accordance with expectations, contact the manufacturer immediately. Apparent resistance however, should not be confused with poor application, coverage and timing techniques.

Delta-Duo Insecticide may be subject to specific resistance management strategies. For further information contact your local supplier, ChemAg representative or local agricultural agronomist.

Application

Delta-Duo Insecticide is a contact spray. Thorough, even coverage is essential. Residual control of Delta-Duo Insecticide may be reduced if heavy rainfall is received within 48 hours of application.

Export of Treated Produce

Growers should note that suitable MRL's or import tolerances may not be established in all markets for produce treated with Delta-Duo Insecticide. If you are growing produce for export, please check with ChemAg Pty Ltd for the latest information on MRL's and import tolerances BEFORE using Delta-Duo Insecticide.

Equipment

Ground Spray:

Standard low volume boom or high volume equipment may be used.

Aircraft:

Water: Delta-Duo Insecticide may be applied by aircraft using water as a carrier. Water volumes of 10 to 30L/ha have given satisfactory results.

ULV: Delta-Duo Insecticide may also be used without dilution in mixture with some ULV products, as listed in the compatibility table, or applied ULV in combination with D-C-Tron® Cotton Spray Oil. A minimum spray volume of 3.0 L/ha should be applied ULV, using either a compatible ULV insecticide mixture partner and/or D-C-Tron Cotton Spray Oil as the bulking agent.
DO NOT add water – use direct from the container.

For ULV application, Delta-Duo Insecticide must only be applied by aircraft fitted with accurately calibrated ULV equipment, e.g. Micronair AU5000 atomisers. To minimise drift it is essential to produce a suitable spray droplet diameter (volume mean diameter) by controlling the rotational speed of the atomisers. It is recommended that the application parameters in terms of plane speed and blade angle settings are adjusted to deliver a maximum rotational speed of 3000 rpm and a resultant droplet diameter of approximately 100 microns. Rotational speed of the atomisers can be measured by the fitment and maintenance of transducers. Thorough coverage is essential.

Compatibility

Water - Delta-Duo Insecticide may be mixed with most piperonyl butoxide formulations (eg. Pipbut® Synergist) and most formulations of fungicides and insecticides such as chlorothalonil, dimethoate, mancozeb, metalaxyl, methamidophos, methomyl, methyl parathion, monotrotophos, pirimicarb, Ovasyn® EC Insecticide, Predator* 300 and Curacron® Flexi, where these products are required for additional insect control or for control of diseases. Delta-Duo Insecticide may also be mixed with Wuxal® Liquid Foliar Nutrient and most knockdown herbicides. ULV – When sprayed as a ULV product, Delta-Duo Insecticide is compatible with Ovasyn ULV Insecticide, Pipbut Synergist, Predator 300 and Curacron Flexi, where these products are required for additional insect control. Delta-Duo Insecticide is also compatible with D-C-Tron Cotton Spray Oil. For further information on ULV insecticide compatibilities contact ChemAg Pty. Ltd.

Warning: Delta-Duo Insecticide may be mixed with some organophosphate insecticides for additional insect control. Organophosphate insecticides can cause phytotoxicity, which may be exaggerated with multiple applications. The addition of Delta-Duo Insecticide to organophosphate insecticides does not affect the degree of phytotoxicity.

Mixing

Water – Fill the spray tank to about $\frac{3}{4}$ full with clean water. Add the required quantity of Delta-Duo Insecticide to the spray tank with agitators in motion. Where other products are to be mixed, add these after Delta-Duo Insecticide is mixed in the tank. Top up the spray tank to the required volume with clean water, with agitators operating.

When mixing Delta-Duo Insecticide with Pipbut Synergist, add the required quantity of Delta-Duo Insecticide to the spray tank, followed by the Pipbut Synergist, then, with agitators operating, add the required quantity of clean water to the spray tank.

ULV – When Delta-Duo Insecticide is to be applied as a ULV spray in combination with compatible ULV products (or oil), Delta-Duo Insecticide should be added after the ULV product (or oil), with the agitators in motion. Ensure that there is no water, or products containing water, in this mixture, or in the spray equipment.

Protection of Livestock

Dangerous to bees. DO NOT spray on any plants in flower while bees are foraging. Some repellent effect may be apparent for approximately 2 days.

Protection of Wildlife, Fish, Crustaceans and Environment

Dangerous to fish. DO NOT contaminate streams, rivers or waterways with this product or used container.

Drift Warning

DO NOT apply under meteorological conditions or from spraying equipment, which could be expected to cause, spray to drift onto nearby susceptible plants, adjacent crops, croplands or pastures.

Storage and Disposal

Store in the closed, original container in a dry, well ventilated area, as cool as possible out of direct sunlight. Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilisers. Triple or (preferable) pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. Break, crush, puncture or bury empty containers in a local authority landfill. If not available bury the containers below 500mm 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. If recycling, replace cap and return clean to recycler or designated collection point.

Safety Directions

Product is poisonous if swallowed. Facial skin contact may cause temporary facial numbness. Will damage eyes and will irritate the skin. Avoid contact with eyes and skin. Avoid inhaling vapour or spray mist. When preparing spray, wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length PVC gloves and face shield. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves and face shield and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Center (Phone 131126). If swallowed and if more than 15 minutes from a hospital, induce vomiting, preferably using Ipecac Syrup APF

MATERIAL SAFETY DATA SHEET

Additional information is listed in the Material Safety Data Sheet available from ChemAg Pty Ltd.

RE-ENTRY PERIOD

Do not allow entry into treated areas until spray deposits have dried. When prior entry is necessary, wear cotton overalls buttoned to the neck and wrist and elbow-length PVC gloves. Clothing must be laundered after each day's use.

CONDITIONS OF SALE

ChemAg Pty Ltd accepts responsibility of the consistent quality of this product; however since application of this product is beyond the control of ChemAg Pty Ltd and since all conditions of application cannot be seen, ChemAg Pty Ltd accepts no responsibility whatsoever for any injury, damage, loss or other results following the use of this product whether used in accordance with directions or not; subject to any overriding statutory provision and provided that such liability under those provisions shall be limited to the replacement of the goods as supplied or the rendering again of the services that are provided. The buyer accepts and uses this material subject to these conditions.

NRA Approval No:

<p>THIS PRODUCT IS NOT CLASSIFIED AS A DANGEROUS GOOD UNDER THE AUSTRALIAN CODE FOR THE TRANSPORT OF DANGEROUS GOODS BY ROAD AND RAIL</p>
<p>IN A TRANSPORT EMERGENCY DIAL 000 POLICE OR FIRE BRIGADE</p>

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Predator® is a Registered Trademark of Dow AgroSciences.
Pix® is a Registered Trademark of BASF
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NRA Approval Number – 53118/0700

Batch Number
Date of Manufacture: