

Product Name: IMTRADE DELTA-DUO INSECTICIDE

APVMA Approval No: 53118/127182

Label Name:	me: IMTRADE DELTA-DUO INSECTICIDE					
Signal Headings:	POISON					
	KEEP OUT OF REACH OF CHILDREN					
	READ SAFETY DIRECTIONS BEFORE OPENING OR USING					
Constituent	ACTIVE CONSTITUENT: 27.5 c/L DELTAMETHOIN					
Statements:	ACTIVE CONSTITUENT: 27.5 g/L DELTAMETHRIN SOLVENT: 807 g/L HYDROCARBON LIQUID					
Mode of Action:	GROUP 3A INSECTICIDE					
Statement of Claims:	For the control of Heliothis (Helicoverpa spp.) and other specified pests on Cotton and various other crops as per the Directions for Use table.					
Net Contents:	5L - 1000L					
Restraints:						
Directions for Use:	This section contains file attachment.					
Other Limitations:						
Withholding Periods:	Cotton, Maize, Mung Beans, Navy Beans, Sorghum, Sunflower: DO NOT HARVEST FOR					
	7 DAYS AFTER APPLICATION.					

Export of Treated Produce

Trade Advice:

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

General Instructions:

This section contains file attachment.

Resistance Warning:

INSECTICIDE RESISTANCE WARNING

GROUP 3A INSECTICIDE

For insecticide management, DELTA-DUO is a Group 3A Insecticide. Some naturally occurring insect biotypes resistant to DELTA-DUO 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 and other Group 3A Insecticides are used repeatedly. The effectiveness of DELTA-DUO on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, Imtrade Australia Pty Ltd accepts no liability for any losses that may result from the failure of DELTA-DUO 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 may be subject to specific resistance management strategies. For further information contact your local supplier, Imtrade Australia Pty Ltd representative or local agricultural department agronomist.

Precautions:

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.

Protections:

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 fertilizers. Triple 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 deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in

compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers and product. DO NOT re-use empty container for any other purpose.

Envirodrum - Micro Matic Valve (110L only)

Store the original sealed Envirodrum in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight. DO NOT tamper with the Micro Matic valve or the security seal. DO NOT contaminate the Envirodrum with water or any other foreign matter. After each use of the product please ensure that the Micro Matic coupler, delivery system and hoses are disconnected, triple rinsed with clean water and drained accordingly.

Refillable Containers (1000L only)

Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

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 Instructions:

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766). If in eyes wash out immediately with water. If swallowed, do NOT induce vomiting.

CROP	PEST	STATE	RATE	CRITICAL COMMENTS	
Cotton	Native Budworm (H.punctigera), Cotton Bollworm	QLD, NSW, WA, NT only	700 mL/ha	Use when insect reinfestation pressure is high (i.e. moderate to heavy egg laying is occurring and small to medium larvae are present).	
	(H.armigera)		600 mL/ha	Use when low to moderate egg laying is occurring and only a few small to very small larvae are present (see note below).	
			500 mL/ha	Use when egg laying is low and larvae are just about to hatch (see note below).	
	Pink Spotted Bollworm	QLD only	500 - 600 mL/ha	Apply at first sign of activity before larvae enter boll. Repeat as necessary.	
Maize (Corn)	Corn Earworm and Native Budworm (<i>Heliothis</i>)	All States	500 mL/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 (Heliothis)	All States	500 mL/ha	Apply at first sign of pest, generally from head emergence onward. In tight head varieties, <i>Heliothis</i> may be protected and not readily controlled. Repeat sprays as necessary.	
	Sorghum Midge	Vic, SA, WA only			
		Qld, NSW, NT only	200 - 400 mL/ha	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 (<i>Heliothis</i>), Looper	All States	500 mL/ha	Inspect crops regularly from early terminal development (4 leaf stage) onwards. Apply before <i>Heliothis</i> or Looper are 5mm long.	
	Green Vegetable Bug	All States		Apply as soon as adult Green Vegetable Bugs are seen, before there is a build up of nymphs.	
Sunflower	Corn Earworm and Native Budworm (<i>Heliothis</i>), Rutherglen Bug, Jassids	All States	500 mL/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. <i>Heliothis</i> 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.	
Oil Tea Tree	Bark Eating Weevil	All States	300 - 450 mL/ha	Regular crop monitoring is essential. Apply by boom spray or aerial application. Affected areas should be identified and only these localised areas sprayed when 15% of plants have wounds to bark and vascular tissue caused by Bark Eating Weevil. Apply a thorough spray to achieve sufficient crop penetration. Use highest rate when insect pressure is heavy.	

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

NOTES:

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

Before opening, carefully read Directions for Use, Precautionary Statements, Safety Directions and First Aid Instructions.

MIXING

Applied with Water – Fill the spray tank to about ¾ full with clean water. Add the required quantity of DELTA-DUO to the spray tank with agitators in motion. Where other products are to be mixed, add these after DELTA-DUO is mixed in the tank. Top up the spray tank to the required volume with clean water, with agitators operating.

When mixing DELTA-DUO with Pipbut® Synergist, add the required quantity of DELTA-DUO to the spray tank, followed by the Pipbut® Synergist, then, with agitators operating, add the required quantity of clean water to the spray tank.

Applied ULV – When DELTA-DUO is to be applied as a ULV spray in combination with compatible ULV products (or oil), DELTA-DUO 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.

Application & Equipment

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

Ground Spray:

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

Aircraft:

Applied with Water - DELTA-DUO may be applied by aircraft using water as a carrier. Water volumes of 10 to 30L/ha have given satisfactory results.

Applied ULV - DELTA-DUO 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, as described in the table below, should be applied ULV, using either a compatible ULV insecticide mixture partner and/or compatible oil as the bulking agent.

DO NOT add water – use direct from the container.

Crop	Pest	Minimum Total Spray Volume for ULV Application L/ha
Cotton	Native Budworm (H.punctigera), Cotton Bollworm (H.armigera)	3
	Pink Spotted Bollworm	2.5
Maize	Corn Earworm and Native Budworm (Heliothis)	2.5
Sorghum	Corn Earworm and Native Budworm (Heliothis)	2.5
	Sorghum Midge (VIC, SA, WA only)	2.5
	Sorghum Midge (QLD, NSW, NT only)	1
Soybeans, Navy Beans,	Corn Earworm and Native Budworm (Heliothis), Looper	2.5
Mung Beans	Green Vegetable Bug	2.5
Sunflower	unflower Corn Earworm and Native Budworm (<i>Heliothis</i>), Rutherglen Bug, Jassids	

For ULV application, DELTA-DUO 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

Applied with Water – DELTA-DUO may be mixed with most piperonyl butoxide formulations (e.g. Pipbut* Synergist) and most formulations of fungicides and insecticides such as Chlorothalonil, Dimethoate, Mancozeb, Metalaxyl, Methamidophos, Methomyl, 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 may also be mixed with Wuxal® Liquid Foliar Nutrient and most knockdown herbicides.

Applied ULV – When sprayed as a ULV product, DELTA-DUO is compatible with Ovasyn® ULV Insecticide, Pipbut® Synergist, Predator®300 and Curacron® Flexi, where these products are required for additional insect control. DELTA-DUO is also compatible with D-C-Tron® Cotton Spray Oil, D-C-Trate® and Ulvapron® Oil. For further information on ULV insecticide compatibilities contact Imtrade Australia Pty Ltd.

WARNING: DELTA-DUO 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 to organophosphate insecticides does not affect the degree of phytotoxicity.