# CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING



# **ACTIVE CONSTITUENT: 200 g/kg DINOTEFURAN**



For the control of silverleaf whitefly, green mirid and green vegetable bug on cotton and green mirids on mung beans as per the Directions for Use table.

# AgNova Technologies Pty Ltd

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#### **DIRECTIONS FOR USE**

#### **RESTRAINTS**

**DO NOT** apply more than 2 applications per crop.

**DO NOT** reapply within 14 days of a previous DINOTEFURAN (Starkle®) application.

**DO NOT** apply where the slope exceeds 4%.

#### **SPRAY DRIFT RESTRAINTS**

Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift.

**DO NOT** allow bystanders to come into contact with the spray cloud.

**DO NOT** apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. The buffer zones in the buffer zone tables below provide guidance but may not be sufficient in all situations. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

**DO NOT** apply unless the wind speed is between 3 and 20 kilometres per hour as measured at the application site during the time of application.

**DO NOT** apply if there are hazardous surface temperature inversion conditions at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

#### **MANDATORY NO-SPRAY ZONES**

**DO NOT** apply if there are aquatic and wetland areas including aquacultural ponds, surface streams and rivers located downwind from the application area and within the **mandatory no-spray zones** shown in Table A.

<b>Table A</b> – No-Spray Zones for Protection of Aquatic Environment		
Wind Speed Range at Time of Application	Downwind Mandatory No-Spray Zone	
FOR AERIAL APPLICATION	Fixed-Wing	
From 3 to 8 kilometres per hour		
From 8 to 14 kilometres per hour	80 m	
From 14 to 20 kilometres per hour		
FOR GROUND APPLICATION		
From 3 to 20 kilometres per hour	5 m	

CROP	PEST	RATE	CRITICAL COMMENTS
Cotton	dilutus)	90 to 150 g/ha	Monitor crops following industry best practice guidelines and commence applications once local thresholds are reached.
			Use appropriate rate for the insect pest being targeted for control.  Ensure thorough spray coverage of the crop. Inadequate spray coverage may result in reduced pest control, especially in the lower crop canopy and against established populations.
	Silverleaf yhitefly (Bemisia tabaci) 250 to 375 g/ha	250 to 375 g/ha	Insect death may take several days following ingestion. Pest control should be assessed initially by a reduction in pest activity.
			Performance can be reduced in stressed crops (e.g. drought affected dryland cotton), or when senescing late season or when pests are not actively feeding in the upper crop canopy.
			Continue to monitor crops following industry best practice guidelines and make a subsequent application as necessary.
			Use in accordance with the current Insecticide Resistance Management Strategies.
	Green 375 g/ha vegetable bug ( <i>Nezara</i> viridula)	375 g/ha	Green mirid: Use higher rates when canopy closure may adversely affect spray coverage. Use a rate that matches the size of the crop, water volume applied, and weather conditions. Follow advice of your crop consultant when selecting a rate.
			Best control of green mirids will be achieved when application is made while green mirids are feeding in the upper canopy.
			Silverleaf whitefly:
			Use the higher rate when longer residual control is required or during periods of high pest pressure or rapid crop growth or when crops are well advanced.
			Using STARKLE on established silverleaf whitefly populations after canopy closure may result in variable insect control, especially in the lower canopy.
			When both mirids and silverleaf whitefly are present and silverleaf whitefly is at or above industry spray thresholds, use the appropriate silverleaf whitefly rate.
Mung beans	Green mirid (Creontiades dilutus) 90 g/ha	90 g/ha	Monitor crops and commence applications once local thresholds are reached.
			Ensure thorough spray coverage of the target. Inadequate spray coverage may result in reduced pest control, especially in the lower crop canopy and against established populations.
			Performance can be reduced in stressed crops. Continue to monitor crops and make a subsequent application as necessary.

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

## WITHHOLDING PERIODS

Cotton, Mung beans:

Harvest: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.

Mung beans:

Grazing: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 14 DAYS AFTER APPLICATION.

#### **Cotton:**

Grazing: DO NOT GRAZE TREATED COTTON CROPS OR CUT FOR STOCKFEED. DO NOT FEED COTTON TRASH TO LIVESTOCK.

**EXPORT TRADE ADVICE** — **TREATED CROPS:** Treated crop commodities destined for export may require extra time between application and harvest to be accepted in some export markets. Before you use this product, you are advised to contact AgNova Technologies and/or your industry body about any potential trade issues and their management.

#### **GENERAL INSTRUCTIONS**

#### MIXING/APPLICATION

#### Mixing

Partially fill the spray tank with clean water and add the required quantity of product to the water surface. Allow the product to submerge before agitating. Top up the tank with clean water to the required volume.

#### **Application**

Thorough coverage of the crop is essential. The minimum water application volumes below are indicative only and depending on the crop stage, canopy density, target pest location in the crop and weather conditions, the application volume must be increased to achieve optimal coverage. Application equipment should be calibrated to deliver a MEDIUM spray droplet size.

It is important to ensure that spray application occurs when parameters are optimal. Application should take into account factors including temperature, relative humidity, delta T and wind speed. Avoid conditions that will reduce the quality of spray coverage. Spraying in less than optimal conditions or with greater than MEDIUM spray droplet size may reduce the efficacy of the product.

#### **Ground Rig Application**

Apply in a minimum of 80 L/ha water. Apply as a blanket spray or banded spray ensuring thorough coverage is achieved.

#### **Aerial Application**

Apply in a minimum of 30 L/ha water. Use appropriate water volume to achieve thorough coverage. A strategy to minimise spray drift should be employed at all times when aerially applying sprays. Such a strategy is illustrated by the cotton industry's myBMP.

#### **INSECTICIDE RESISTANCE WARNING**



For insecticide resistance management STARKLE is a Group 4A insecticide. Some naturally occurring insect biotypes resistant to STARKLE and other Group 4A insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if STARKLE or other Group 4A insecticides are used repeatedly. The effectiveness of STARKLE on resistant individuals could be significantly reduced. Since the occurrence of resistant individuals is difficult to detect prior to use, AgNova Technologies Pty Ltd accepts no liability for any losses that may result from the failure of this product to control resistant insects. STARKLE may be subject to specific resistance management strategies. For further information contact your local supplier, AgNova Technologies Pty Ltd representative or local agricultural department agronomist.

## **PRECAUTIONS**

# **RE-ENTRY PERIOD**

DO NOT allow entry into treated areas until the spray has dried, unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length chemical resistant gloves. Clothing must be laundered after each day's use.

#### PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Very toxic to aquatic life. DO NOT contaminate wetlands or water courses with this product or used containers.

#### PROTECTION OF HONEYBEES AND OTHER INSECT POLLINATORS

Highly toxic to bees and will kill bees foraging in a treated crop or in hives which are accidentally sprayed or contaminated by spray drift. Spray residues remain toxic to bees for 2-3 days after application. To protect the long term viability of hives, remove or cover beehives during application and for 5 days after treatment.

DO NOT allow spray drift to flowering weeds or flowering crops in the vicinity of the treatment area. Before spraying notify beekeepers to move hives to a safe location with an untreated source of nectar and pollen, if there is potential for managed hives to be affected by the spray or spray drift.

#### **INTEGRATED PEST MANAGEMENT**

Toxic to beneficial arthropods. Follow the Cotton Pest Management Guide when using this product. Minimise spray drift to reduce harmful effects on beneficial arthropods in non-crop areas.

#### STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight.

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 to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm 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 or product.

#### **SAFETY DIRECTIONS**

Will irritate the eyes. Will irritate the skin. Avoid contact with eyes and skin. When opening the container, preparing spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), chemical resistant gloves and face shield or goggles. If product on skin, immediately wash area with soap and water. If product in eyes, wash out immediately with water. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

#### **FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26, New Zealand 0800 764 766.

#### **SAFETY DATA SHEET**

If additional hazard information is required refer to the Safety Data Sheet. For a copy visit our website at agnova.com.au

#### **CONDITIONS OF SALE**

AgNova Technologies Pty Ltd shall not be liable for any consequential or other loss or damage relating to the supply or subsequent handling or use of this product, unless such liability by law cannot be lawfully excluded or limited. All warranties, conditions or rights implied by statute or other law which may be lawfully excluded are so excluded. Where the liability of AgNova Technologies Pty Ltd for breach of any such statutory warranties and conditions cannot be lawfully excluded but may be limited to it re-supplying the product or an equivalent product, or the cost of a product or an equivalent product, then the liability of AgNova Technologies Pty Ltd for any breach of such statutory warranty or condition is so limited.

<sup>®</sup> Starkle is a registered trademark of Mitsui Chemicals Agro, Inc.

This label requires no additional statements in accordance with the Globally Harmonised System of Classification and Labelling (GHS).

In a transport emergency dial 000, Police or Fire Brigade. For specialist advice in an emergency only, call 1800 033 111 (24 hours).

APVMA Approval No: 69398/132943

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