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## STARKLE® 200 SG is a fast and effective insecticide for SLW & mirids in cotton. Rapid knockdown with excellent residual control.

### MODE OF ACTION

- STARKLE is classified as a GROUP 4A insecticide. The active ingredient is a member of the nitroguanidine group of insecticides, which are related to neonicotinoids.
- STARKLE is an agonist to the nicotinic acetylcholine receptor of the target pest
- STARKLE has exceptional water solubility and works by both contact and ingestion. The product has rapid systemic movement resulting in fast penetration and translocation within the plant.

STARKLE provides fast knockdown and up to two weeks control of adult mirids and nymphs when applied at 90 g/ha. STARKLE is well suited to controlling early and mid-season mirid infestation.

STARKLE provides fast knockdown and residual control of silverleaf whitefly (SLW) adults and nymphs, with a range of use rate options.

Starkle on SLW is best and lasting when used early and product can reach the intended target.

### STARKLE & BENEFICIAL SPECIES

Independent field testing has shown STARKLE to be relatively selective for non- target beneficial species:

- **Mirids (90 g/ha)**
  - Very low effect lacewings
  - Low effect spiders
  - Moderate effect predatory beetles, predatory bugs, wasps & thrips
- **SLW (375 g/ha)**
  - Very low effect lacewings
  - Low effect spiders
  - Moderate effect wasps
  - High effect predatory beetles, predatory bugs, thrips

The following is an extract of the product label and does not constitute the complete directions for use. The product label should be read thoroughly before opening the packaging.

CROP	PEST	RATE	CRITICAL COMMENTS
Cotton	Silverleaf whitefly ( <i>Bemisia tabaci</i> )	250 g to 375 g/ha	<p>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.</p> <p>Using Starkle on established silverleaf whitefly populations after canopy closure may result in variable results.</p> <p>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.</p> <p>When both pests are present and silverleaf whitefly is at or above industry spray thresholds, use the appropriate silverleaf whitefly rate.</p> <p>Continue to monitor crops and make a subsequent application as necessary. Performance can be reduced in stressed crops (eg drought affected dryland cotton) or when senescing late season.</p> <p><b>Do not apply more than 2 applications per crop. Do not reapply within 14 days of a previous Starkle application.</b> Use in accordance with the current Insecticide Resistance Management Strategies.</p>
	Green mirid ( <i>Creontiades dilutus</i> ) ONLY	90 g/ha	

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## BENEFITS OF STARKLE:

- Fast knockdown and lasting control of SLW nymphs and adults
- Knockdown and lasting control of mirid nymphs and adults
- No resurgence of heliothis, SLW and aphids when applied at the mirid rate
- Moderate impact on beneficials when applied at the silverleaf whitefly rate
- Unique properties not shared with other neonicotinoids
- Low mammalian toxicity & low occupational exposure risk
- Safe to cotton crops

## RESISTANCE MANAGEMENT STRATEGIES:

- DO NOT use more than 2 applications per crop
- DO NOT re-apply within 14 days of a previous STARKLE application
- DO NOT use the mirid rate when SLW is at or above threshold in the crop
- Use in accordance with current CropLife Insecticide Resistance Management Strategies
- Refer to the SLW THRESHOLD MATRIX as published in the Cotton Pest Management Guide.

## BEE SAFETY

Spray residues remain toxic to bees for 2-3 days after application. To protect long term viability of beehives, remove or cover beehives during application and for 5 days after treatment. Follow CropLife guidelines under their BeeConnected program.

## WITHHOLDING PERIOD

**Harvest:** DO NOT harvest for 14 days after application

**Grazing:** DO NOT graze treated cotton crops or cut for stockfeed  
DO NOT feed cotton trash to livestock

## 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.

## GROUND APPLICATION

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

## AERIAL APPLICATION

Apply in a minimum of 30 L/ha water. Use appropriate water volume to achieve thorough coverage.

## MANDATORY NO-SPRAY ZONES

DO NOT apply if there are aquatic and wetland areas including aquacultural ponds, surface streams and rivers within 5 metres downwind from the application area and within the mandatory no-spray zones detailed on the product label.

## SURFACTANTS

Surfactants are not required for use with STARKLE but may be used if required with a tank-mix partner.

## DROPLET SIZE

Use only medium spray droplets according to specifications of the nozzle manufacturer that refer to the ASAE S572 Standard or BCPC guideline.

## COMPATIBILITY

A range of tank-mix partners has been compatibility tested (physical and bio-efficacy) with STARKLE. These include:

- Abamectin
- Dimethoate
- Altacor\* (+BS1000)
- Steward\*
- Affirm\* (+BS1000)
- Pix\*
- Round-up Ready\* Glyphosate

As formulations differ between brands, growers should conduct their own small scale compatibility test prior to mixing commercial quantities. Refer to the AgNova website for the latest compatibility data.

Tank-mixes should be mixed and sprayed out as soon as possible. Do not leave tank-mixed chemicals overnight.

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