

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



SPECTRUM 350 SC

SOIL INSECTICIDE

ACTIVE CONSTITUENT: 350 g/L IMIDACLOPRID

GROUP 4 INSECTICIDE

A soil applied treatment for the control of greyback and Childers canegrub in sugarcane and silverleaf whitefly in various vegetable crops as specified in the DIRECTIONS FOR USE table.

IMPORTANT: READ THIS BOOKLET BEFORE USE



APVMA Approval No: 66265/53155 *Surefire is a registered trademark of PCT INTERNATIONAL PTY LTD (PCT Holdings Pty Ltd ABN 11 099 023 962) 1/74 Murdoch Circuit, Acacia Ridge QLD 4110 + http://pct.au.com CUSTOMER SERVICE FREECALL 1800 630 877 EMERGENCY RESPONSE (ALL HOURS) FREECALL 1800 630 877

DIRECTIONS FOR USE

Restraints:

DO NOT use on crops produced hydroponically or in glasshouses and other covered situations.

DO NOT apply Surefire Spectrum 200SC Insecticide or any other Group 4A Insecticide as a foliar spray after soil application of Surefire Spectrum 350 SC Soil Insecticide in that crop.

DO NOT apply more than one application of Surefire Spectrum 350 SC Soil Insecticide per crop for vegetables or per ration crop for sugarcane.

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Sugar cane (ratoon	Greyback canegrub	16 -22 mL per 100 metres of cane row (equivalent to 1.05-1.44	21 weeks	Apply from September to November to fields which are at high risk of greyback grub damage.
(ratoon cane only)		(equivalent to 1.05-1.44 L/ha for single row cane with 1.52 m spacing between rows)		In areas where early flights of beetles occur, application should be early within this period. Late applications where large 3 rd instar larvae dominate the grub population will not be as effective. Application should be made while stools are small enough to avoid excessive damage. Use the high rate when high grub populations are expected, e.g. an average greater than 4 grubs per stool. Apply only as a subsurface soil application behind coulters (refer to Application directions under GENERAL INSTRUCTIONS). Soil should have moisture at coulter depth at the time of application or should receive at least 15 mm of rainfall or irrigation within 1 week. DO NOT leave Surefire Spectrum 350 SC exposed to sunlight. After application ensure the Surefire Spectrum 350 SC treated band is covered by at least 100 mm of soil and that coulter slits are filled in completely.
	Childers canegrub	11 - 16 mL per 100 metres of cane row (equivalent to 0.72 - 1.05 L/ha for single row cane with 1.52 m spacing between rows)		DO NOT apply more than once per season. Apply from September to November. Check for the presence of grubs from September onwards. Apply Surefire Spectrum 350 SC when grub numbers reach an economic threshold (about 3 grubs per stool). Use the high rate when grub populations are high, e.g. an average greater than 5 grubs per stool or if application is late (damage already visible). Apply only as a subsurface soil application behind coulters (refer to Application directions under GENERAL INSTRUCTIONS). Soil should have moisture at coulter depth at the time of application or should receive at least 15 mm of rainfall or irrigation within 1 week. DO NOT leave Surefire Spectrum 350 SC exposed to sunlight. After application ensure the Surefire Spectrum 350 SC treated band is covered by at least 100 mm of soil and that coulter slits are filled in completely. DO NOT apply more than once per season.

SAFETY DIRECTIONS

Harmful if swallowed. Repeated exposure may cause allergic disorders. When preparing product for use, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield. Wash hands after use. After each day's use, wash gloves, face shield and contaminated clothing.

FIRST AID

If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia 131126.

MATERIAL SAFETY DATA SHEET

Additional information is listed in the Material Safety Data Sheet available from the supplier.

CONDITIONS OF SALE

The use of Surefire Spectrum 350 SC Soil Insecticide is beyond the control of the manufacturer. Therefore, no warranty, expressed or implied is given by PCT HOLDINGS PTY LTD regarding its suitability or efficacy for any purpose. PCT HOLDINGS PTY LTD cannot accept any responsibility for any consequence whatsoever resulting from the use of this product, save for those nonexcludable conditions implied by the Trade Practices Act, 1974.

®Trademark

CROP	PEST	RATE	CRITICAL COMMENTS
Capsicum Cucurbits Eggplant Sweet potato Tomatoes	Silverleaf whitefly, including type B	14 mL/100 metres of row 14 mL/100 metres of row	Sub-surface trickle irrigation injection Apply once only 5 to 7 days after planting out (or 5 to 7 days from seed emergence if planted from seed). Begin injection only after water has reached the furthest drip points and soil is partially wetted up. After Surefire Spectrum 350 SC injection is completed, continue irrigation only until lines are flushed, not longer than 1 hour. DO NOT apply Surefire Spectrum 350 SC using surface trickle irrigation or any other type of above ground irrigation system. Subsequent irrigations should occur only when soil moisture measurements indicate the need for addition of water. Do not over irrigate or cause runoff. In situations where root development in the crop is slow, evidence of control may be delayed. Furrow spray pre-plant
		(Mix with water, using at least 2 litres of spray mixture per 100 m of row)	Apply to open furrow not earlier than 5 days prior to planting as a narrow band of spray centred under the plant row. Do not leave Surefire Spectrum 350 SC exposed to sunlight. Sprayed soil should be covered immediately. After final shaping of the planting bed, the treated layer of soil should be approximately 100 mm below the soil surface. At planting, steps should be taken to ensure workers do not contact treated soil.
Capsicum, eggplant, tomatoes		14 mL/100 metres of row (Mix with sufficient water to allow a constant volume of at least 50 mL of drench mixture per plant)	Plant hole drench DO NOT apply Surefire Spectrum 350 SC by this method where plant spacing along the row exceeds 60 cm. Apply the selected volume of drench mixture in the planting hole at planting or within 2 days after planting. Steps should be taken to ensure workers do not contact treated soil or drench mixture.

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

WITHHOLDING PERIODS: Harvest (H): NOT REQUIRED WHEN USED AS DIRECTED Grazing (G): Sugarcane: DO NOT GRAZE OR CUT FOR STOCKFEED FOR 21 WEEKS AFTER APPLICATION

GENERAL INSTRUCTIONS Insecticide Resistance Warning



For insecticide resistance management, Surefire Spectrum 350 SC Soil Insecticide is a Group 4A insecticide. Some naturally occurring insect biotypes resistant to Surefire Spectrum 350 SC Soil Insecticide 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 Surefire Spectrum 350 SC Soil Insecticide are used repeatedly. The effectiveness of Surefire Spectrum 350 SC Soil Insecticide are used repeatedly. The effectiveness of Surefire Spectrum 350 SC Soil Insecticide on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, PCT Holdings Pty Ltd accepts no liability for any losses that may result from the failure of Surefire Spectrum 350 SC Soil Insecticide to control resistant insects. Surefire Spectrum 350 SC Soil Insecticide to specific resistance management strategies. For further information contact your local supplier, PCT representative or local agricultural department agronomist.

Resistance Management Strategy (vegetables)

Do not apply more than one soil application of Surefire Spectrum 350 SC Soil Insecticide to each crop. Do not use Surefire Spectrum 200SC Insecticide or any Group 4A insecticide as a foliar spray after soil application of Surefire Spectrum 350 SC in that crop. Refer to district advice for local silverleaf whitefly resistance management strategies.

Export of Treated Produce

Growers should note that MRLs or import tolerances do not exist in all markets for edible produce treated with Surefire Spectrum 350 SC Soil Insecticide. If you are growing edible produce for export, please check with PCT Holdings Pty Ltd for the latest information on MRLs and import tolerances before using Surefire Spectrum 350 SC Soil Insecticide.

Note for Vegetable Crops: potential migration of silverleaf whitefly from neighbouring crops

Adult silverleaf whitefly (SLWF) is controlled when they ingest a lethal dose of active ingredient by feeding on a Surefire Spectrum 350 SC Soil Insecticide treated crop. However, in some very susceptible crops and varieties, the migration of large populations of adults from adjacent fields may result in significant feeding damage to the crop, although further reproduction and development of the pest will be prevented. To help prevent such damage it is important to minimise the migration of adult SLWF into a treated crop, e.g. by applying a 'clean-up' fast-acting insecticide to recently harvested crops. Consideration of factors such as planting sequences and timing, wind direction, variety selection, and general crop hygiene should also be integral to SLWF management. Crops should also be monitored for SLWF adult numbers after application of Surefire Spectrum 350 SC Soil Insecticide, and appropriate fast acting insecticides for control of adults should be applied if economic thresholds are reached or excessive adult feeding damage is observed.

Mixing

Prior to pouring, shake container vigorously, then add the required quantity of Surefire Spectrum 350 SC Soil Insecticide to water in the tank while stirring or with agitators in motion. Surefire Spectrum 350 SC requires constant agitation in the tank.

Application (sugarcane)

Apply only as a subsurface soil application. Apply in no less than 1.5 litres of water per 100 metres of cane row (equivalent to no less than 100 L/ha of water for single row cane with 1.52 m spacing between rows).

Greyback canegrub

Twin coulter method: Apply subsurface behind twin coulters to a depth of 100-125 mm. Coulters should be spaced 220 mm to 500 mm apart, one either side of the centre of the stool. Coulter slits should be in the sides or top of the stool mound rather than at the base. Narrow spacings may not be possible with advanced ratoon growth. DO NOT apply using narrow spacings if ratoon growth is advanced such that excessive crop damage from equipment may result.

<u>Single coulter method ("stool split"):</u> Apply subsurface behind a single coulter in the centre of the stool. DO NOT apply using this method if ratoon growth is advanced such that excessive crop damage from equipment may result. This method is not suitable for all areas. Before using this method, consult your local PCT representative.

Childers canegrub

Twin coulter method: Apply subsurface behind twin coulters to a depth of 100-125 mm. Coulters should be spaced 220 to 350 mm apart, with one coulter on either side of the centre of the stool.

Application (vegetables)

Refer to instructions in Critical Comments for each application method.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used containers. **Imidacloprid is toxic to certain aquatic species.**

Application should be planned to avoid run-off within 48 hours of application. Application should not be made to wet/waterlogged soils. Application is not to be performed if heavy rains are expected to occur within 48 hours. Irrigation run-off from treated areas should be prevented from entering drains and waterways.) Sugarcane: Irrigation should not occur within 48 hours of application. Vegetables (furrow spray pre-plant and plant hole drench applications): Irrigation within 48 hours of application should be minimal, and sufficient to reduce seedling stress only.

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 or preferably pressure rinse container before disposal. Add rinsings to spray or injection 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.