

Product Name: TOKUTHION INSECTICIDE SPRAY
APVMA Approval No: 33087/135663



Label Name:	TOKUTHION INSECTICIDE SPRAY
Signal Headings:	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Constituent Statements:	ACTIVE CONSTITUENT: 500 g/L PROTHIOFOS (an anticholinesterase compound) SOLVENT: 398 g/L XYLENE
Mode of Action:	GROUP 1B INSECTICIDE
Statement of Claims:	For the control of banana weevil borer in bananas, various caterpillar pests of crucifers and longtailed mealybug in pears as specified in the DIRECTIONS FOR USE table
Net Contents:	200 L 20 L 5 L
Restrains:	
Directions for Use:	This section contains file attachment.
Other Limitations:	
Withholding Periods:	WITHHOLDING PERIODS Crucifers: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION Pears: DO NOT HARVEST FOR 8 WEEKS AFTER APPLICATION

Trade Advice:	<p>EXPORT OF TREATED PRODUCE</p> <p>Growers should note that MRLs or import tolerances do not exist in all markets for edible produce treated with Tokuthion. If you are growing edible produce for export, please check with UPL Australia Pty Ltd for the latest information on MRLs and import tolerances before using Tokuthion.</p>
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General Instructions:	<p>GENERAL INSTRUCTIONS</p> <p>Mixing Mix the required quantity of Tokuthion with water in the spray vat while stirring or with agitators operating.</p> <p>Application Dilute Spraying (pears)</p> <ul style="list-style-type: none"> ◆ Use a sprayer designed to apply high volumes of water up to the point of run-off and matched to the crop being sprayed. ◆ Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to the point of run-off. Avoid excessive run-off. ◆ The required water volume may be determined by applying different test volumes, using different settings on the sprayer, from industry guidelines or expert advice. ◆ Add the amount of product specified in the Directions for Use table for each 100 L of water. Spray to the point of run-off. ◆ The required dilute spray volume will change and the sprayer set up and operation may also need to be changed, as the crop grows. <p>Baiting for Banana Weevil Borer Set the baits from September to May at monthly intervals. Spray the cut surfaces of the bait with 20 mL of the prepared spray solution. Apply the spray once only to baits prepared from freshly cut material. Form baits by the following methods from the corm of recently harvested stools only:</p> <ol style="list-style-type: none"> A. Cut a pointed cone with a desuckering gouge. Squirt the chemical over the surfaces of the hole and loosely reinsert the cone turned through 90° B. Cut a single slot with a small axe and spray the cut surfaces C. Horizontally cut open the corm, spray the surfaces and prop open the cut to about 1 cm with a small rock <p>As well, recently fallen stools can be cut into blocks and one surface of each block sprayed. That surface is placed on the ground.</p> <p>Compatibility Tokuthion is NOT compatible with Delan 750 SC. Do not mix concentrates together but add each to the spray tank separately. As formulations of other manufacturers' products are beyond the control of UPL, all mixtures should be tested prior to mixing commercial quantities. As changes in climatic conditions can alter the sensitivity of plants to mixtures of sprays, UPL cannot be responsible for the behaviour of such mixtures.</p>
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Resistance Warning:	<p>INSECTICIDE RESISTANCE WARNING GROUP 1B INSECTICIDE</p> <p>For insecticide resistance management, Tokuthion is a Group 1B insecticide. Some naturally occurring insect biotypes resistant to Tokuthion and other Group 1B insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Tokuthion and other Group 1B insecticides are used repeatedly. The effectiveness of Tokuthion on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, UPL Australia Pty Ltd accepts no liability for any losses that may result from the failure of Tokuthion to control resistant insects. Tokuthion may be subject to specific resistance management strategies. For further information contact your local supplier, UPL representative or local agricultural department agronomist.</p>
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	Insecticide Resistance Management Strategy for Banana Weevil Borer in Bananas: Contact your local supplier, UPL representative or local agricultural department agronomist for details.
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Precautions:	
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Protections:	PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT Do not contaminate ponds, waterways or drains with the chemical or used container.
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Storage and Disposal:	<p>STORAGE AND DISPOSAL</p> <p>Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight.</p> <p>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.</p> <p>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.</p> <p>This container can be recycled if it is clean, dry, free of visible residues and has the drumMUSTER logo visible. Triple-rinse container for disposal. Dispose of rinsate by adding it to the spray tank. Do not dispose of undiluted chemical on site. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at any drumMUSTER collection or similar container management program site. The cap should not be replaced, but may be taken separately.</p>
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Safety Directions:	<p>SAFETY DIRECTIONS</p> <p>Product and spray are poisonous if absorbed by skin contact, inhaled or swallowed. Repeated minor exposure may have a cumulative poisoning effect. Avoid contact with eyes, skin and clothing. Do not inhale spray mist. When preparing spray wear elbow-length PVC gloves. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.</p>
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First Aid Instructions:	<p>FIRST AID</p> <p>If swallowed, splashed on skin or in eyes, or inhaled, contact a Poisons Information Centre (Phone Australia 13 11 26, New Zealand 0800 764 766) or a doctor at once. Remove any contaminated clothing and wash skin thoroughly. If swallowed, activated charcoal may be advised. Give atropine if instructed.</p>
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First Aid Warnings:	
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DIRECTIONS FOR USE

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Bananas	Banana weevil borer (Qld, NSW, NT, WA only)	1 L/100 L or 330 mL/100 L	-	Apply 500-750 mL spray mixture/stool. Apply spray to the lower 30 cm of the butt and to the surrounding soil to a radius of 30 cm. Apply at time of maximum weevil activity: (a) in spring (September to November) OR (b) in late summer/autumn (February to April). Apply at the higher rate where maximum residual control is required. Use the lower rate where effective knockdown is required and a shorter residual is acceptable or soil movement is likely to remove the soil containing the chemical away from the base of the plant. Re-treat as required. One application of Tokuthion Insecticide Spray at the higher rate per year should be adequate for banana weevil borer control in sub-tropical areas. Effective control of banana weevil borer is unlikely unless treatment is accompanied by sound management practice to ensure good plant hygiene. Plants should be regularly stripped of old stems and unwanted suckers. Weeds and trash should be cleared from surrounding soil.
Bananas (harvested or fallen stools)		330 mL/100 L		Refer to "Baiting for Banana Weevil Borer" under GENERAL INSTRUCTIONS for directions on setting baits. Note: Do not apply this technique to stools carrying bunches. This technique is not recommended for populations rated at two weevils per trap or greater. Use in conjunction with standard soil treatment with a registered insecticide to combat moderate to high population levels.
Banana plant (residual plant only)	Banana weevil borer (NSW only)	25 mL/1 L water		Inject 8 mL solution per residual stem. Treat only old, softened residual plant stems at a height of 60-100 cm. Apply with a forestry type injection gun. Best months for treatment are June to September. This control method will only aid in the reduction of beetle borer adult numbers resident in the spent harvested pseudostems.
Broccoli, Brussels sprouts, Cabbage, Chinese cabbage, Kale, Kohlrabi	Cabbage centre grub, cabbage moth, cabbage white butterfly, cluster caterpillar <i>Helicoverpa</i> spp.	150 mL/100 L or 1.5 L/ha	7 days	Apply as an overall spray when pests are first seen and repeat at 7 day intervals or as required. Add a wetting agent. Tokuthion may be applied through ground rigs or aircraft.

Pears	Longtailed mealybug (Vic, SA only)	Dilute spraying 100 mL/100 L	8 weeks	<p>Apply by dilute spraying equipment. Mix with semi-dormant oil at label rate. Apply at or around green-tip when crawlers become active under bark scales. Spray to run-off to aid penetration behind bark scales. Refer to the Application section.</p> <p><u>Note: Concentrate spraying is not appropriate for this use.</u></p> <p>Follow up sprays of other suitable insecticides will be required later in the season when crawlers again become active.</p> <p>This product may be used in conjunction with integrated mite control programs using the predatory mite <i>Typhlodromus occidentalis</i> but not <i>Typhlodromus pyri</i>.</p>
	Mealybug (Qld, NSW, ACT, WA only)			

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