



Sparta™

INSECTICIDE

ACTIVE INGREDIENT: Contains 120 g/L spinetoram formulated as an aqueous suspension concentrate.

GROUP 5 INSECTICIDE

An insecticide for the control of various pests in potatoes, tomatoes, bulb onions, forage brassicas, vegetable brassicas, citrus, pipfruit, stonefruit, subtropical fruit and pasture.

READ THIS LABEL COMPLETELY BEFORE MIXING OR APPLYING

Dow AgroSciences (NZ) Ltd
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www.corteva.co.nz
Telephone 0800 803 939

HAZARD CLASSIFICATION: 6.9B, 9.1A, 9.4A

APPROVED HANDLER

This product must be under the personal control of an approved handler when:

- a) applied in a wide dispersive manner; or
- b) used by a commercial contractor.

RECORD KEEPING

Records of use, as described in the relevant HSNO Act regulations and the New Zealand Standard for the Management of Agrichemicals (NZS8409), must be kept if more than 3 L of **SPARTA** is applied, or discharged within 24 hours in a place where members of the public may be present or where the substance may enter air or water and leave the place.

TOXICITY

HARMFUL: MAY CAUSE ORGAN DAMAGE FROM REPEATED ORAL EXPOSURE AT HIGH DOSES. DO NOT eat, drink or smoke while using. Remove protective clothing immediately after handling this product and wash hands and face before meals and after work.

ECOTOXICITY

VERY TOXIC TO AQUATIC ORGANISMS. SPARTA must not be applied onto or into water. **DO NOT** contaminate an aquatic environment with chemical or empty container. **DO NOT** spray over or allow drift over an aquatic environment.

VERY TOXIC TO TERRESTRIAL INVERTEBRATES.

Dangerous to bees. Avoid direct application or drift of the spray mix onto bees. Once the spray deposit has dried, foraging bees will not be affected. See also "pollinators" section on the label.

HANDLING PRECAUTIONS

EQUIPMENT

Apply using accurately calibrated and maintained equipment in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409).

Flush equipment thoroughly with clean water after use according to Cleaning of Spray Equipment instructions below. Dispose of cleaning water according to the Disposal instructions below.

STORAGE

Store in the original container tightly closed and in a locked, dry, cool, well-ventilated area, well away from foodstuffs. Stores containing 100 L or more of **SPARTA** are subject to containment and signage. See the Hazardous Substances Emergency Management and Identification Regulations and the New Zealand Standard for the Management of Agrichemicals (NZS8409) for further information. Storage must be generally in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409).

PERSONAL PROTECTION

Normal work clothes (overalls buttoned to the wrist, water resistant workboots and a washable hat) should be worn when mixing or applying **SPARTA**. Use of a face shield or goggles is also recommended when preparing and using the spray mixture.

SPILLAGE

DO NOT touch or walk through spilled material. Wear the protective equipment recommended above. Stop leak if safe to do so. Dike area and prevent entry into waterways and drains. **Small spills/leaks:** Contain and absorb small spills with a proprietary absorbent suitable for chemical spills or inert material such as sand, soil or sawdust.

Collect spilled product and place in sealable container for disposal. Spill residues may be cleaned using water and detergent. Contain and absorb wash water for disposal. Absorb and collect washings and place in the same sealable container for disposal. **Large spills/leaks:** Dam the area of large spills and report them to Corteva Agriscience Emergency Services at 0800 844 455.

DISPOSAL

Triple rinse empty container and add rinsate to spray tank. Triple rinsed containers containing the Agrecovery logo on the label that are free of all residues (liquid and dry) and have an intact legible label should be taken to an Agrecovery collection site. Otherwise crush or puncture and bury in a suitably approved landfill. **DO NOT** burn empty containers.

Dispose of this product by using according to the label, or via Agrecovery (visit <http://www.agrecovery.co.nz> or call 0800 AGRECOVERY (247 326) for information about the type and quantity of chemical acceptable for disposal), or at an approved landfill. **DO NOT** burn.

Dispose of unused spray mix and equipment cleaning water onto non-grazed and non-cropped ground away from edible and flowering plants.

DO NOT dispose of this product, spray mix or equipment cleaning water down drains or sewers.

FIRST AID

If swallowed **DO NOT** induce vomiting. For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. If splashed in eyes, wash out immediately with water. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

SAFETY DATA SHEET

A Safety Data Sheet for **SPARTA** is available from Corteva Agriscience on request. Call Customer Service Toll Free on 0800 803 939 or visit www.corteva.co.nz.

TRANSPORT

This product may be carried on a passenger service vehicle, providing there is compliance with the Dangerous Goods requirements.

NOTICE

Important: You **must** read the warning and conditions given on this label. If they are not acceptable, or if you are in doubt as to the proper handling of this product (including its transport, storage, use, disposal and requirements for approved handlers [if applicable]) then return the unopened product to the supplier at once.

Warning: This product is subject to controls and could be hazardous if handled incorrectly. The **user is responsible** for ensuring that the handling of this product is in accordance with the law (including the *Hazardous Substances and New Organisms Act 1996* and the *Agricultural Compounds and Veterinary Medicines Act 1997*) and with the directions provided. The Registrant declines all liability (whether in contract, tort (including but not limited to negligence), or otherwise) to the maximum extent permitted by law in relation to the handling of this product in a manner which is contrary to the directions given or to any applicable Acts, Regulations or Guidelines.

Further information regarding the applicable Acts, Regulations and Guidelines for the proper handling of this product may be obtained by contacting EPA New Zealand (www.epa.govt.nz) or the Ministry for Primary Industries (MPI) (www.foodsafety.govt.nz).

This product is warranted to contain the specified active ingredients within accepted analytical tolerance when packed.

APPLICATION METHODS

Ground application: SPARTA can be applied with conventional ground boom or orchard spraying equipment. Flush equipment thoroughly with clean water after use.

Aerial application: SPARTA can be applied aerially to forage brassicas and pastures only. Apply in a minimum of 50 L/ha water. Increase water rates with canopy size and density to ensure thorough coverage.

IMPORTANT: In order to select the appropriate nozzles for the required spray quality and to operate the equipment to minimize spray drift, this product must be applied in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409).

CLEANING OF SPRAY EQUIPMENT

Rinsing

After using SPARTA:

- Empty the spray tank completely and drain the whole system. Thoroughly wash inside the unit using a pressure hose. Drain spray unit and clean any filters in the tank, pump, lines, hoses and nozzles.
- After cleaning the spray unit as above, quarter fill with clean water and circulate the water through the pump, lines, hoses and nozzles. Drain and repeat the rinsing procedure twice.
- Discard rinse water on land already sprayed or on wasteland away from water sources.

MIXING

Pour the required quantity of SPARTA into the partly filled spray tank and then add the remainder of the water, agitating thoroughly during filling. Agitate thoroughly during spraying and before spraying after a stoppage.

COMPATIBILITY

Wetters and spreaders: Latron B-1956 is the preferred wetter for use with SPARTA. Where Latron B-1956 is substituted by another adjuvant, ensure that the alternative product is a reputable, horticultural grade wetter or spreader that has a known history of safe use on the target crop. **DO NOT** use SPARTA in mixture with adjuvants that have potential to cause crop injury. Ensure any adjuvant substituted for Latron B-1956 has very similar wetting properties to Latron B-1956 at the recommended rates.

SPARTA is compatible with most commonly used agrichemicals, including T-MAX™, Radiate™, Versatill PowerFlo™, Gallant™ Ultra and glyphosate herbicides. Consult Corteva Agriscience for further information regarding compatibility.

STORAGE OF DILUTED SPRAY MIX

Whenever possible use spray mix immediately after it is prepared. However, when weather conditions prevent immediate use, the spray mix may be stored for up to 72 hours without loss of activity. The spray mix must be stored out of direct sunlight. Before spraying after storage, thoroughly agitate the spraymix to ensure complete re-suspension of SPARTA.

RAINFASTNESS

Avoid applications when rain is expected within 6 hours of spraying.

RESISTANCE MANAGEMENT

GROUP 5 INSECTICIDE

SPARTA is a spinosyn insecticide (Group 5). Some naturally occurring individual insects may become resistant when excessive use of the same insecticide occurs. To maximize the effectiveness of insecticides, products containing alternate modes of action should be used in the spray program. Consult <http://resistance.nzpps.org/> for alternate modes of action and the details of resistance management strategies (if any) for the crops listed on the label. See Use Directions table below for specific recommendations for SPARTA.

Resistance to this product may develop from excessive use. To minimise this risk, use strictly in accordance with label instructions. SPARTA has a unique mode of action and controls pest species that are resistant to conventional insecticides. To help prevent the development of resistance **DO NOT** apply more than 4 applications of SPARTA to any crop in any one season. Use insecticides from a different chemical group if more than 4 applications are required.

POLLINATORS

When applied during non-foraging periods, SPARTA will not interfere with the activity of honey bees once the spray has dried. At least 3 hours drying time should occur before bee foraging is expected. At times when bees aggregate in large numbers outside the hive, ensure they are not directly contacted by the spray.

WITHHOLDING PERIODS

It is an offence for the users of this product to cause residues exceeding the relevant MRL in the Food Notice: Maximum Residue Levels for Agricultural Compounds.

Potatoes:	7 days
Tomatoes:	7 days
Onions (bulb):	3 days
Vegetable brassicas:	3 days
Citrus:	14 days
Stonefruit:	3 days
Pipfruit:	7 days
Subtropical fruit:	14 days

Forage brassicas:

Meat: **DO NOT** cut for feed, or graze animals intended for slaughter within 14 days after application.

Milk: **DO NOT** cut for feed, or graze animals for milk within 7 days after application.

Pasture:

Meat: **DO NOT** graze animals intended for slaughter within 3 days of application.

Milk: **DO NOT** graze animals for milk within 1 day after application.

Orchards:

DO NOT allow livestock to graze in orchards treated with SPARTA until at least 28 days after the last application.

Refer to export industry withholding period charts for export produce. Where SPARTA is tank mixed with another product, observe the longest applicable withholding period.

DIRECTIONS FOR USE

It is an offence to use this product on animals.

SPARTA works by both contact and ingestion activity. Exposed larvae stop feeding immediately but can take up to 3 days to die.

CROP	PEST	APPLICATION RATE & COMMENTS	APPLICATION TIMING & COMMENTS
Potatoes and field tomatoes	Tomato/Potato psyllid (TPP) <i>Bactericera cockerelli</i>	375 – 500 mL/ha Apply by broadcast application from the ground (boom spraying). Use the higher rate when TPP pressure is high and/or foliage density is high. Only apply the low rate to small plants when TPP pressure is low. Always apply SPARTA in sufficient water (500 L/ha) to ensure thorough coverage and with a suitable wetter/spreader.	As part of a season long programme, apply up to four, “back to back” applications of SPARTA at 7 day intervals.
Bulb onions	Thrips <i>Thrips tabaci</i>	500 mL/ha Apply from the ground by broadcast application (boom spraying). Always apply SPARTA in sufficient water (500 L/ha) to ensure thorough coverage.	As part of a season-long programme, apply up to four “back to back” applications of SPARTA at 7 day intervals. Apply with horticultural grade wetter/spreader with a history of safe use on onions.
Forage brassicas	Diamond back moth, white butterfly, looper caterpillars, leaf miner larvae	150 mL/ha Apply by broadcast application. Ensure thorough coverage. For ground application use 150 - 250 L/ha of water, for aerial application use minimum 50 L/ha of water. Increase water volume with crop growth stage and apply with an appropriate wetter/spreader.	Monitor pest populations and apply at the onset of insect damage in periods when pest numbers will increase. A single repeat application may be required if a new infestation occurs. Addition of Lorsban 50EC Insecticide (300 mL/ha) will control aphids.
	Springtails <i>Bourletiella hortensis</i>	20 mL/ha Apply during early post-emergence by broadcast application. Apply with an appropriate wetter/spreader. Ensure thorough coverage.	Assess for presence of springtails by placing an A4 sheet of white paper on the ground and vigorously banging the ground on either side, once or twice, with a large hammer or similar object. If present, springtails will jump onto the paper.
	Suppression of Nysius (wheat bug) <i>Nysius huttoni</i>	150 mL/ha Apply during early post-emergence by broadcast application. Apply with Uptake Spraying Oil (1 L/ha). Ensure thorough coverage.	Monitor Nysius populations and apply prior to damage.

CROP	PEST	APPLICATION RATE & COMMENTS	APPLICATION TIMING & COMMENTS
Vegetable brassicas	Diamond back moth, white butterfly, looper caterpillars, leaf miner larvae	200 mL/ha Apply by broadcast application from the ground (boom spraying). Use a minimum spray volume of 250 L/ha water. Ensure thorough coverage by increasing water volume with crop growth stage. Apply with an appropriate wetter/spreader.	Closely monitor pest populations and time sprays to coincide with egg hatch. Repeat applications at 7 - 10 day intervals as new infestations occur.
Pasture	Springtails <i>Bourletiella hortensis</i>	20 mL/ha Apply at time of spray-out by broadcast application. Apply with an appropriate wetter/spreader. Ensure thorough coverage.	Assess for presence of springtails by placing an A4 sheet of white paper on the ground and vigorously banging the ground on either side, once or twice, with a large hammer or similar object. If present, springtails will jump onto the paper.
Citrus	Thrips	High volume spraying: Dilution rate: 40 mL/100 L water. Apply in 1000 – 2000 L water per hectare depending on the foliage density and size of tree. DO NOT apply more than 800 mL/ha.	Apply every 14 days, or as part of an IPM program, and re-apply when thresholds are exceeded. DO NOT apply more than 4 applications in any one season. Add Latron B-1956 surfactant (25 mL/100 L) to the spray mix. Ensure thorough coverage.
Pipfruit (apples and pears)	Codling Moth, Leafrollers	High volume spraying: Dilution rate: 20 mL/100 L water. Apply in 2000 L water per hectare. DO NOT apply less than 400 mL/ha.	Apply every 14 days or as part of an IPM program, commencing at petal fall and re-apply when thresholds are exceeded. DO NOT apply more than 4 applications in any one season.
Stonefruit	Leafroller	High volume spraying: Dilution rate: 20 mL/100 L water. Apply in 2000 L water per hectare. DO NOT apply less than 400 mL/ha.	Apply from petal fall at 14 day intervals, or when pest thresholds are exceeded. Ensure thorough coverage.
	Oriental fruit moth	High volume spraying: Dilution rate: 40 mL/100 L water. Apply in 2000 L water per hectare. DO NOT apply less than 800 mL/ha.	Apply from petal fall at 14 day intervals, or when pest thresholds are exceeded. Add Latron B-1956 surfactant (25m L/100L) to the spray mix. Ensure thorough coverage.

CROP	PEST	APPLICATION RATE & COMMENTS	APPLICATION TIMING & COMMENTS
Stonefruit	Thrips	<p>High volume spraying: Dilution rate: 20 - 40mL/100 L water. Apply in 2000 L water per hectare. DO NOT apply less than 400 mL/ha.</p> <p>When thrip pressure is high:</p> <ol style="list-style-type: none"> 1. Use the high dilution rate. 2. DO NOT apply less than 800 mL/ha. 3. Apply at 7 day intervals. 	<p>Petal fall Apply from petal fall at 10-14 day intervals, or when pest thresholds are exceeded.</p> <p>Pre-harvest Apply twice at 7 day intervals with the last application 3 days before harvest.</p> <p>Both timings Add Latron B-1956 surfactant (25 mL/100L) to the spray mix. Ensure thorough coverage.</p>
	<p>Petal fall applications: apply when visitation of blossom by bees has ceased. Concentrate spraying: ensure thorough coverage. DO NOT apply less than the minimum rate per hectare.</p>		
Avocado, feijoa, passionfruit, tamarillo and other subtropical fruit with inedible peel except kiwifruit	Leafroller	<p>High volume spraying: Dilution rate: 20 mL/100L water. Apply as a high volume spray in sufficient water, relevant to tree and foliage density to ensure thorough coverage to point of runoff. DO NOT apply more than 800 mL/ha</p>	<p>Apply every 14 days, or as part of an IPM program, and re-apply when thresholds are exceeded. DO NOT apply more than 4 applications in any one season. Thrips in avocados: always add Latron B-1956 surfactant (40 mL/100L) to the spray mix.</p>
	Thrips	<p>High volume spraying: Dilution rate: 40 mL/100 L water <u>plus</u> Latron B-1956. Apply as a high volume spray in sufficient water, relevant to tree and foliage density to ensure thorough coverage to point of runoff. DO NOT apply more than 800 mL/ha</p>	
<p>Resistance Management DO NOT apply more than 4 applications of SPARTA per crop in any one season.</p> <p>Onions and potatoes Use SPARTA only in a sequence of four “back to back” applications per season. Apply insecticides with different modes of action for the remainder of the season. DO NOT apply more than 4 applications of SPARTA to onion and potato crops in any one season.</p> <p>Vegetable brassica pests Apply SPARTA at the timing recommended in the “Diamondback moth resistance management and prevention strategy” on the New Zealand Plant Protection Society website (see link below). http://resistance.nzpps.org/index.php?p=insecticides/diamondback</p>			

Registered pursuant to the ACVM Act 1997, No P8266
See www.foodsafety.govt.nz for registration conditions.
Approved pursuant to HSNO Act 1996, EPA Approval Code HSR100387
See www.epa.govt.nz for approval controls.

Registered to:
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EMERGENCY RESPONSE

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IN A TRANSPORT EMERGENCY

DIAL 111
FOR POLICE OR FIRE