



Dow AgroSciences

Lorsban™ 750 WG

Insecticide

Controls insects in tree and vine fruit, pasture and onions

READ THE LABEL COMPLETELY BEFORE MIXING OR APPLYING

ACTIVE INGREDIENT:

Contains 750 g/kg chlorpyrifos in the form of a water dispersible granule.

GROUP

1

INSECTICIDE

HARMFUL - Keep out of reach of children
ECOTOXIC

NET CONTENTS: 3 kg (9 x 333g water soluble packs)

®™ Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

Revision Date:

INFORMATION WITHIN THIS BOX IS NOT PART OF THE LABEL
3rd December 2018 replaces 3rd February 2014

HAZARD CLASSIFICATION

6.1D, 6.8B, 6.9A, 9.1A, 9.2B, 9.3A, 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 relevant HSNO regulations and the New Zealand Standard for the Management of Agrichemicals (NZS8409), must be kept if more than 3kg 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

THIS SUBSTANCE MAY BE HARMFUL IF SWALLOWED, OR ABSORBED THROUGH THE SKIN. MAY CAUSE ORGAN DAMAGE FROM REPEATED ORAL EXPOSURE AT HIGH DOSES. MAY DAMAGE FERTILITY OR THE UNBORN CHILD FROM REPEATED ORAL EXPOSURE. **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. **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 VERTEBRATES AND SOIL ORGANISMS. Use only according to label directions.

INSECTICIDE – TOXIC TO TERRESTRIAL INVERTEBRATES. **DO NOT spray over bees or apply to plants in flower.**

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 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.

Storage must be generally in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409). Stores containing 100kg or more of Lorsban™ 750 WG Insecticide are subject to signage. See the Hazardous Substances Emergency Management and Identification Regulations and the New Zealand Standard for the Management of Agrichemicals (NZS8409) for further information.

PERSONAL PROTECTION

When mixing or applying wear eye protection, chemical resistant gloves made of a material such as neoprene or polyvinyl chloride, chemical resistant boots, cotton overalls buttoned to the neck and wrist and a washable hat.

SPILLS

Do not touch or walk through spilled material. Wear personal protection as recommended above. Stop further spill occurring and prevent entry into waterways and drains. **Small spills:** In case of spill on floor or paved surfaces sweep up and place in drums for disposal at a licensed local authority landfill. Spill residues may be cleaned using water and detergent. Contain and absorb wash water. Seek advice from the SDS, product label or Dow AgroSciences regarding disposal. **Large spills:** Report large spills to Dow AgroSciences Emergency Services at 0800 844 455.

DISPOSAL

Crush and bury in a suitably approved landfill.

Dispose of equipment cleaning water onto ground away from food or feed crops and plants.

Dispose of this product only by using according to the label, or via Agrecovery (visit 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.

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

FIRST AID

If swallowed, splashed on skin or in eyes, or inhaled, contact the National Poisons Centre 0800 POISON (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. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

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.

TRANSPORT

Do not carry more than 10kg on a passenger service vehicle. Quantities of 10kg or less may be carried on a passenger service vehicle when contained within sealed packaging.

SAFETY DATA SHEET



A Safety Data Sheet is available from Dow AgroSciences on request. Call Customer Service Toll Free on 0800 803 939 or visit www.dowagrosciences.co.nz.

Registered pursuant to the ACVM Act 1997, No P5275.
See www.foodsafety.govt.nz for registration conditions.

Back panel all pack sizes

Approved pursuant to HSNO Act 1996, EPA Approval Code HSR000167
See www.epa.govt.nz for approval controls.

Registered to: Dow AgroSciences (NZ) Ltd 89 Paritutu Road Private Bag 2017 New Plymouth 4342 Telephone 0800 803 939 www.dowagrosciences.co.nz	EMERGENCY RESPONSE (All hours) Ring from anywhere in New Zealand 0800 844 455 or +61 6 751 2407	IN A TRANSPORT EMERGENCY DIAL 111 FOR POLICE OR FIRE
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------

 	Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Chlorpyrifos). Marine pollutant. Class: 9 UN Number: 3077 Packing Group: III HAZCHEM 2X
------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Date of Manufacture:

Batch No.

Barcode

Revision Date:

INFORMATION WITHIN THIS BOX IS NOT PART OF THE LABEL
3rd December 2018 replaces 3rd February 2014

APPLICATION:

Lorsban 750 WG Insecticide can be applied with conventional ground spraying equipment. Screens and nozzle strainers finer than 300 micrometres should not be used. Flush equipment with clean water after use as described in the Cleaning Spray Equipment section of this label.

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 spray equipment:Rinsing

After using Lorsban 750 WG Insecticide:

- 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 food and feed crops and water sources.

MIXING:

To ensure a uniform suspension, mix the correct amount of Lorsban 750 WG Insecticide with a small quantity of water to produce a thin cream. Pour into the partly filled tank and while agitating, add the remainder of the water. Agitate thoroughly before and during spraying, and before spraying after a stoppage.

Alternatively, water-soluble packs of Lorsban 750 WG Insecticide may be mixed directly with water in the spray tank. A convenient method of mixing is to place the appropriate number of water-soluble packs into the inlet filter of the sprayer where they will dissolve as the spray tank is filled.

COMPATIBILITY:

Lorsban 750 WG Insecticide is compatible with many other commonly used pesticides. However do NOT mix with highly alkaline materials such as Bordeaux mixture and lime-sulphur.

Kiwifruit: DO NOT mix with other pesticides, wetting agents or other additives such as foliar fertilisers, growth promotants etc.

STORAGE AND HANDLING OF WATER SOLUBLE PACKS:

Water-soluble packs should not be stored in a moist environment. Do not remove them from the outer container before they are needed. Reseal the outer container carefully for storage. Avoid wetting water-soluble packs inside the container. If only part packs are needed, they may be cut and insecticide weighed out as with conventional packs. Part packs may be resealed with a bag tie and should be stored dry in the original outer container.

DILUTION RATES FOR 333g WATER SOLUBLE PACKS OF Lorsban 750 WG Insecticide:

The rates suggested in the table below are for high volume spraying to run-off. For concentrate spraying, adjust dilution rate accordingly.

Desired Application Rate (g/100L)	Required number of water soluble packs per 2000L of water. High volume spraying*
33	2
50	3

Desired Application Rate (kg/ha)	Required number of water soluble packs per ha
0.666	2
1.33	4

* For concentrate spraying, adjust dilution rate accordingly

WITHHOLDING PERIODS

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

Avocado:	Do not harvest within 14 days of application.
Citrus:	Do not harvest within 14 days of application.
Grapes:	Do not harvest within 14 days of application.
Kiwifruit:	Do not harvest within 14 days of application.
Onions:	7 days
Pasture:	Do not graze pasture crops for 7 days after application of Lorsban 750 WG Insecticide.
Pip Fruit:	Do not harvest within 14 days of application.
Stone Fruit:	Do not harvest within 28 days of application.

Note: Refer to export industry withholding period charts for export produce.

Insecticide

RESISTANCE MANAGEMENT

GROUP**1****INSECTICIDE**

Lorsban 750 WG Insecticide is an organophosphate insecticide (Group 1). 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.

DIRECTIONS FOR USE:

It is an offence to use this product on animals.

CAUTION:

On crops grown under cover, or on sensitive grape varieties test Lorsban™ 750 WG Insecticide alone or in mixture on a few plants first. When applied to very soft foliage, (e.g. during flush growth under glass) transient leaf burn may occur.

NOTE:

On all crops pesticides should be applied at correct times and rates through appropriate, well calibrated and operated equipment. Over-application may result in crop damage or excessive residues.

Crop Specific Recommendations

The rates suggested are for high volume spraying to run-off. For concentrate spraying, adjust dilution rate accordingly.

Crop	Pest	Rate	Comments
Kiwifruit	Greedy scale, leaf roller and passion vine hopper.	33 g/100 L. Apply 0.666 kg/ha at each spray application.	Pre-blossom. Apply at green tip (at least 10 days after dormant lime-sulphur application) and again shortly prior to blossom. Post-blossom. Apply at 21-28 day intervals from 14 February (or if petal fall is later than 14 December apply from 60 days after complete petal fall) until 14 days before harvest. If passion vine hopper occurs after mid February, this pest will also be controlled with the above schedule. If numbers are high, surrounding vegetation may also need treating. Kiwifruit are prone to russet particularly in the early post-blossom period. Avoid application of pesticides under conditions that favour russet, for example when the fruit is wet, during slow drying conditions or in mixture with other additives.
Pip Fruit	Leaf roller, mealy bug, codling moth, scale crawlers, woolly aphid, bronze beetle, brown beetle.	33-50 g/100L as a dilute spray. DO NOT use less than 1.33 kg/ha on APPLES and 2 kg/ha on PEARS.	Apply at bud movement (with intermediate oil) then at 2 week intervals for the rest of the season commencing at petal fall. Ensure complete coverage of the tree.

Revision Date:

INFORMATION WITHIN THIS BOX IS NOT PART OF THE LABEL
3rd December 2018 replaces 3rd February 2014

Crop	Pest	Rate	Comments
	Mealy Bug, Woolly Aphid:	50 g/100 L as a dilute spray	Apply at bud movement (with intermediate oil) then 10-12 days later. Use the above schedule from petal fall. Ensure complete coverage of the tree.
Stone Fruit	Leaf roller, mealy bug, aphids, bronze beetle, brown beetle.	33-50 g/100L as a dilute spray. DO NOT use less than 1.33 kg/ha.	Apply at 2 week intervals throughout the season commencing at petal fall. Ensure complete coverage of the tree.
	Mealy Bug	50 g/100 L as a dilute spray	Apply at early bud movement (with intermediate oil). Leaf damage may occur on certain varieties of cherries.
Avocado	Leaf rollers.	High volume: 33-50 g/100L. Spray to run-off. Aerial: 1.33kg/ha	Apply pre-blossom, at complete petal fall then at 21 day intervals to the end of April. After April applications may be made if leaf rollers are present.
Citrus	Leaf roller, mealy bug, aphids, scale crawlers, thrips.	33-50 g/100 L as a dilute spray. DO NOT use less than 1 kg/ha.	Apply pre-flower and then at monthly intervals from petal fall for the rest of the season. If using alone add a non-ionic surfactant.
	Scale		If scale insects are a problem apply at 14-21 day intervals from early December through to early February.
	Mealy Bug	50 g/100 L	Apply at 14 day intervals during periods of peak mealy bug activity.
Grapes	Leaf roller, mealy bug, aphids, scale crawlers, thrips, grape vine weevil.	33-50 g/100L of water. DO NOT use less than 0.666 kg/ha at full foliage.	Apply at bud swell (with intermediate oil) at pre-flower, post-flower and 14 days later, then at 3-week intervals for the rest of the season. Ensure adequate penetration of bunches particularly for mealy bug control. Use 50 g/100 L of water early in the season, for mealy bug control or when insect populations are high.
Ornamentals	Caterpillars, aphids, leaf roller, mealy bug, scale crawlers, bronze beetle, brown beetle.	Knapsack or Gun Application: 33 g/100L in 1000-3000 L/ha water Boom Application: Use 0.666 kg/ha in 400L/ha of water.	Apply at first sign of insect attack and repeat at 14-day intervals as necessary. The addition of a non-ionic surfactant is recommended to improve coverage on ornamentals. When Lorsban 750 WG Insecticide is mixed with other pesticides do not use additional surfactant. Completely wet foliage and stems.

Crop	Pest	Rate	Comments
Pasture	Clover Root Weevil	333 g/ha (1 water soluble bag/ha)	Apply during periods of high pest pressure. In new pasture apply at clover seedling emergence. Moist conditions during the previous summer may result in multiple generations the following year. In these situations, two applications at 167 g/ha (1 water soluble bag/2 ha) applied 14 days apart will maximise control of adult weevils.
	Army Caterpillar	260 g/ha (2 water soluble bags/2.5 ha)	Apply at first sign of damage.
	Lucerne Flea	133 g/ha (1 water soluble bag/2.5 ha)	Apply when 10-20% of clover leaflets show damage preferably in the late autumn - early winter period when juvenile (nymph) stages predominate.
	Porina Caterpillar	800 - 1067 g/ha (2.5 - 3 water soluble bags/ha)	Use the low rate in the pre-frost period when the caterpillars are small. The pasture should be closely grazed before treatment.
	Springtails	133 g/ha (1 water soluble bag/2.5 ha)	Apply 1-2 days before pasture emergence or as soon as damage is evident.
	Stem Weevil	800 g/ha (2.5 water soluble bags/ha)	Apply when eggs are present. To determine the time of application monitor samples of tillers. Examine the lower leaf sheath for eggs and if present treat as soon as possible.
	Tasmanian Grass grub	800 - 960 g/ha (2.5 - 3 water soluble bags/ha)	Apply to short dry pasture between April and June at first sign of pasture damage. Harrowing of dung patches is recommended prior to spraying to expose larvae.
Onions	Onion thrips	667 g/ha (2 bags/ha)	Apply when monitoring shows thrip numbers exceed the action threshold recommended by the onion industry resistance management strategy. Apply a cluster of 3-4 applications at 10-14 day intervals during cool weather or 5-7 day intervals during hot weather. If monitoring shows further treatment is required, use an insecticide containing another active ingredient. Applications should be made in 400 – 500L/ha water ensuring thorough coverage. The addition of a wetting agent is recommended.