WARNING - FLAMMABLE LIQUID AND VAPOUR TOXIC - KEEP OUT OF REACH OF CHILDREN ECOTOXIC



Insecticide

TOPPEL

A broad-spectrum insecticide for the control of insect pests in agricultural and horticultural crops



ACTIVE INGREDIENT: Contains 480g/litre chlorpyrifos in the form of an emulsifiable concentrate. Also contains 442g/litre xylene.

Registrant: Ravensdown Fertiliser Co-operative Ltd Level 1, 32 Oxford Terrace Christchurch, New Zealand Telephone: 03 353 4600 Facsimile: 03 353 4625

Batch:

D.O.M:



READ LABEL CAREFULLY BEFORE USING TOPPEL

This product must not be used for any purpose, or in any manner, contrary to the label unless authorized under appropriate legislation.

HAZARD CLASSIFICATION: 3.1C, 6.1C, 6.3A, 6.4A, 6.8B, 6.9A, 9.1A, 9.2B, 9.3A, 9.4A

APPROVED HANDLER

This product must be under the control of an approved handler when it is applied in a wide dispersive manner or used by a commercial contractor.

TRACKING

Location and movement of this product must be recorded at each stage of its lifecycle.

TOXICITY

Toxic - May be fatal if swallowed, inhaled or absorbed through the skin. May cause organ damage from repeated oral exposure at high doses. Harmful - May cause skin and eye irritation. May cause reproductive or development damage from repeated oral exposure at high doses.

FLAMMABILITY

Warning - Flammable Liquid and Vapour. Keep away from sources of ignition.

ECOTOXICITY

Very toxic to aquatic organisms. Avoid contamination of any water supply with chemical or empty container.

Toxic to the soil environment.

Very toxic to terrestrial vertebrates and terrestrial invertebrates.

Very toxic to bees. Spray must not contact plants in flower if they are likely to be visited by bees.

HANDLING PRECAUTIONS

STORAGE

Do not store near heat or flame.

Keep out of reach of children.

Store in accordance with NZS 8409 Management of Agrichemicals.

Store in original container tightly closed in a locked, dry, cool, well ventilated area away from sources of heat and ignition, foodstuffs, fertilizers and seeds. Avoid storing this product with Class 1, 2, 3.2, 4 or 5 substances.

Stores containing 100L of Toppel are subject to signage and secondary containment. More than 100L require emergency response plans. Stores containing 500L of Toppel must have at least 2 fire extinguishers.

PERSONAL PROTECTION

Avoid contact with skin, eyes and inhalation of spray mist.

When handling wear full protective clothing such as chemically resistant gloves and boots, respirator, eye protection and overalls. Wash splashes of concentrate from skin and eyes immediately.

Remove protective clothing and wash hands and face thoroughly before meals and after work.

Do not eat, drink or smoke while using.

EQUIPMENT

Apply using well maintained and accurately calibrated equipment. Flush equipment thoroughly with clean water after use.

RECORD KEEPING

Records of use as described in NZS 8409 Management of Agrichemicals must be kept.

DISPOSAL

Triple rinse container and add rinsate to spray tank. Triple rinsed containers containing the Agrecovery logo on the label and that are free of all residues and have an intact legible label may be taken to an Agrecovery collection site for disposal. Otherwise crush or puncture and bury in an approved landfill. Do not burn container. Do not use container for any other purpose. Dispose of product only by using according to label directions or dispose of safely at a managed landfill.

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 skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If splashed in eyes, flush with water for at least 15 minutes. If inhaled, move the patient to fresh air immediately. Begin artificial respiration if breathing has stopped.

0800 100 123

Registered Pursuant to the ACVM Act 1997 P7188 See <u>www.nzfsa.govt.nz/acvm/</u> for registration conditions.

Approved pursuant to the HSNO Act 1996, Code: HSR000225 See <u>www.erma.govt.nz</u> for approval controls.

Agrecovery is available on HDPE containers of 60 litres or less only.



SPILLAGE

In case of spillage, extinguish all ignition sources. Wear appropriate protective clothing and prevent material from entering waterways. Exclude non-essential people from the area. Prevent material coming into contact with Class 1, 2, 3.2, 4 or 5 substances. Contain liquid spills and absorb with inert material such as soil or sand and place in waste containers. Wash area with water and absorb with further inert material. Dispose of waste safely in an approved landfill.

EMERGENCY RESPONSE

In transport emergency call 111, Police or Fire Brigade. For 24hr specialist advice in an emergency only call 0800 CHEMCALL (0800 243 622).

SAFETY DATA SHEET

If additional safety information is required, refer to the Safety Data Sheet. For a copy contact the customer centre on 0800 100 123.

PRODUCT INFORMATION

TOPPEL is an organophosphate insecticide that works directly on insect pests through contact and vapour action. It also works as a stomach poison when ingested by insects. Toppel also remains active in soil for several days.

MIXING

Partly fill the spray tank. Add the required amount of Toppel and start agitation. Complete filling the spray tank and maintain agitation until spraying is complete.

COMPATIBILITY

Toppel is compatible with most commonly used insecticides and fungicides. It should not be mixed with highly alkaline materials such as Bordeaux mixture or lime sulphur.

SHELF LIFE

When stored appropriately this product should show no significant degradation for two years from the date of manufacture. Contact your supplier for further information about the use of any product that is older than this.

RESISTANCE MANAGEMENT

Resistance to Toppel may develop from excessive use. To minimise this risk use strictly in accordance with label instructions and resistance management strategies that exist for any insect pest listed on the label. Avoid using this insecticide exclusively all season and avoid unnecessary spraying. Maintain good cultural control practices.

RECOMMENDATIONS

Unless otherwise indicated, rates suggested are for high volume spraying to the point of run off. For concentrate spraying, adjust dilution rates accordingly. For broadcast application, use 100-200 litres of water/ha through ground spray equipment and 50–100 litres/ha in aerial applications.

WITHHOLDING PERIODS

Avocado and grapes	- 14 days
Cereals for grain	- 8 weeks
Kiwifruit	 Do not apply after bud cracking (first visible petals)
Onions	- 7 days
Pasture and Fodder crops	- 7 days
Pipfruit	- Do not apply after tight cluster
Stonefruit	- Do not apply after petal fall
Squash	- 10 days

RAINFALL

The effectiveness of Toppel may be reduced if rainfall occurs within 3 hours of application.

DIRECTIONS FOR USE

Crop	Pest	Rate	Critical comments
Avocado	Leaf roller caterpillar	50-75ml/100L of water or 1.7L/ha	Apply pre-bloom, at complete petal fall and then repeat at 21 day intervals to the end of April. Continue applications if leaf roller are still present. Use the 1.7L/ha rate for aerial applications.
Brassicas and forage crops	Aphids	300-400ml in 100-200L of water/ha	Apply at the first sign of infestation.
	Nysius (wheat bug)	1.25L/ha in 100-200L of water/ha	Apply to seedling brassica as soon as damage is evident or when nymphs can be seen feeding on seedlings.
	Springtails	200ml in 100-200L of water/ha	Apply 1-2 days before crop emergence or as soon as damage is evident in emerged crop.
Cereals	Cereal, Rose and Grain Aphid	300-400ml/ha	Apply at first sign of infestation. Use the high rate when infestation pressure is high or the crop is dense.
Cereals and Ryegrass	Argentine stem weevil	1.25L/ha in 100-200L of water/ha	Apply as soon as eggs are found on the lower leaf sheaf.
Grapes (except table grapes)	Grape vine weevil, Leafroller caterpillar, Mealy bug, Aphids, Scale crawlers and Thrips	50-75ml/100L of water or 1L/ha	Apply at bud swell in combination with an intermediate oil. Follow up with treatments at pre-flowering, post-flowering, 14 days later and then at 3 week intervals for the remainder of the season. Ensure complete plant coverage and penetration into bunches for optimum control of mealy bug.
Kiwifruit	Greedy scale, Leafroller, Passion vine hopper	50ml/100L of water Apply not less than 1L/ha	Apply at green tip at least 10 days after dormant lime sulphur application. Repeat at pre-blossom, 7 days prior to the introduction of bees. For greedy scale control, complete wetting of vine trunks, leaders and canes is required. The addition of a non-ionic wetting agent is recommended. Do not apply after bud cracking(first visible petals).
Lucerne	Aphids	300-450 ml in 100-200L of water/ha	Apply at first sign of infestation. Use the lower rate on short crops with little foliage and the higher rate on tall leafy crops close to cutting. Do not spray plants in flower.
	Sitona weevil	600-800ml in 100-200L of water/ha	Apply between May and early August with the optimum time being during the last weeks of May. Use the higher rates on dense leafy crops.
Maize	Army caterpillar, Corn earworm	500ml in 50-200L of water/ha	Apply at the first sign of damage and repeat if required 14-21 days later. For corn ear worm, apply before caterpillars are observed and before cob penetration occurs.
	Cut worm	600ml in 50-200L of water/ha	Ensure complete coverage of seedlings and surrounding soil. Apply early post-emergence or as soon as damage occurs. Application in the late evening is advantageous against this nocturnal pest.
Onions	Onion Thrips	1L in 400-500L of water/ha. The use of a wetting agent is recommended.	Apply when monitoring shows numbers exceed recommended action threshold level. Apply 3-4 applications at 10-14 day intervals, close intervals to 5-7 days during hot conditions. If further treatment is required, use an insecticide with a different active ingredient.

DIRECTIONS FOR USE (Continued)

Crop	Pest	Rate	Critical comments
Pasture	Lucerne flea	200ml in 50-200L of water/ha	Apply in the late autumn/ early winter at the first sign of clover damage.
	Army caterpillar	400ml in 50-200L of water/ha	Apply at the first sign of damage.
	Porina caterpillar	1.25-1.7L in 50-200L of water/ha	Apply to closely grazed pasture at the first sign of infestation. Use the lower rate in the pre-frost period when caterpillars are small.
	Tasmanian grass grub	1.25-1.5L in 100-200L of water/ha	Apply between April and June to short dry pasture at the first sign of pasture damage. Harrowing of dung patches is recommended prior to spraying to expose the larvae. Use the higher rate when populations are high.
	Argentine stem weevil	1.25L in 100-200L of water/ha	Apply as soon as eggs are found on the lower leaf sheaf.
Pipfruit and Stonefruit	Leafroller, Mealy bug, Scale crawlers, Woolly aphid and Brown beetle	80ml/100L or not less than 2.4L/ha on mature trees	Pipfruit, apply at bud movement in mixture with a suitable spraying oil and repeat at 10-14 days later at tight cluster without oil. Stonefruit, apply at early bud movement with a suitable spraying oil. Do not apply after petal fall.
Squash	Caterpillars and Aphids	500ml/ha in approximately 200L of water/ha	Apply soon after emergence, at the first sign of insect presence or their damage. Pre-harvest clean up - apply by air at 500ml/ha in 50L of water (500L ground spray) only after flowering is complete and bees have stopped working.
Industrial pests	Spiders, Ants and Slaters	120ml in 10L of water or deodorised kerosene	Apply to areas around doors, windows, eaves and other resting areas. Retreat as required.

WARRANTY AND LIMITATION

IMPORTANT: Read this notice before opening the container.

The registrant warrants that when packed the active ingredient of this product is as specified on this label within accepted analytical tolerances. The registrant gives only those other warranties that are required by law in relation to this product and limits its liability to the cost paid by the claimant for the product. The registrant declines all liability for damage resulting from the handling, storage or use of this product. The user bears the risk from the handling, storage or use of this product. The registrant is not liable for any use of this product. Which is contrary to the label directions given or any Act or Regulation.