

GROUP 3A INSECTICIDE

Active Constituent: 100g/L Bifenthrin

Poison Schedule: 6

APVMA Approval No: 63190

Eligible containers
5L

For the control of certain insects in ornamentals and turf

Pack Size: Dangerous Goods Class:

5L (4 x 5L per carton) Not classified as a dangerous good under the Australian Code

for Transport and Storage of Dangerous Goods in Australia.

DIRECTIONS FOR USE

RESTRAINTS • DO NOT use in situations where predatory mites are established and providing effective mite control. • DO NOT apply if rainfall is expected before spray deposits dry on leaf. • DO NOT use this product at less than label rates. • DO NOT apply to soils if excessively wet or immediately prior to or after heavy rain to avoid run-off of the chemical.

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CROP	PEST	RATE	CRITICAL COMMENTS
Roses, carnations and other ornamental plants.	Two spotted mite (Tet- ranychus urticae	30 or 40mL/100L	Apply at fi rst sign of pest infestation and before pest populations build up to damaging levels. Repeat as necessary on 10-14 day intervals. Best results are obtained from preventative rather than curative applications. Where indicated, use the higher dosage for knockdown of established pest infestations or when longer residual activity is required. Spray to run-off using a spray volume of 1000-1500L/ha.
	Aphids	20mL/100L	Apply at first sign of pest infestation and before pest populations build up to damaging levels. Repeat as necessary on 10-14 day intervals. Best results are obtained from preventative rather than curative applications. Spray to run-off using a spray volume of 10-15L/100m2 and covering both surfaces.
	Caterpillars and loopers, including heliothis (corn ear worm, native budworm) Helicoverpa spp, light brown apple moth (Epiphyas postvittana) and geranium plume moth (Sphenarches arisodactylus)	20mL/100L	Apply at fi rst sign of pest activity and repeat at intervals of 7-10 days while pest pressure persists. More than three sprays may be required to control an existing infestation. Spray to run-off covering both leaf surfaces. Use the higher rate when pest pressure is high, when conditions favour pest development or when increased residual protection is required.
	Whitefly (Trialeurodes vaporarioum), Poinsettia white fly (Bermisia tabaci Biotype B)	20 - 80mL/100L	Apply at first sign of pest activity and repeat at intervals of 7-10 days while pest pressure persists. More than three sprays may be required to control an existing infestation. Spray to run-off covering both leaf surfaces. Use the higher rate when pest pressure is high, when conditions favour pest development or when increased residual protection is required
	Mealy bug (Pseudococcus longispinus)	20mL/100L	Apply at first sign of pest activity and repeat at intervals of 7-10 days while pest pressure persists. Spray to run-off covering both leaf surfaces.
	Plague Thrips (Thrips imagines, T. simplex, T. hawaiiensis)	20mL/100L	Apply at fi rst sign of pest activity and repeat at intervals of 7-10 days while pest pressure persists. Ensure that fl owers and buds are sprayed. Spray to run-off. When buds are opening rapidly and pest pressure is high reducing the spray interval to 3-4 days will give better results. Monitor the population by regular inspection.
	Cutworms (Agrotis spp) in beds, containers and pots.	1.2L/ha 12mL/100m²	Spray evenly over the area to be treated. After application apply approximately 5mm of sprinkler irrigation.
		20mL/100L	Apply as a drench at the rate of 2 litres of prepared spray per square metre of pot area.

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CROP	PEST	RATE	CRITICAL COMMENTS
Turf (e.g. lawns, commercial turf farms, parks, recreational areas, bowling greens, sports fields)	Lawn armyworm (Spodoptera maurita), Sod webworm (Herpetogramma licarsisalis)	1.2L/ha (12mL/100m²)	Mix Biff in water and apply evenly over the area to be treated using spray application equipment. Use a minimum water volume of at least 200L/ha (2L/100m²). To ensure optimum control, irrigate the treated area with up to 4mm of water soon after application. Inspect treated areas for continuing activity. Reapply as require. Where a rate range is indicated use lower rates under lower insect pressure and higher rates underhigher insect pressure. Apply after mowing to minimise loss of insecticide in clippings.
	Argentine stem weevil adults (Listronatus bonariensis)	1.2 – 2.4L/ha (12-24mL/100m²)	
	African black beetle adults (Heteronychus arator)	2.5-3.6L/ha (25-36mL/100m²)	
	Billbug adults (Sphenophorus brunnipinnis)	1.2-2.43L/ha (12 - 24mL/ 100m²)	
	Black ant, coastal brown ant, funnel ant, meat ant, sugar ant and stinging ant only	1.2-4.4L/ha (12-44mL/100m²)	Mix Biff in water and apply evenly over the area to be treated using spray application equipment. Apply to areas where ants are active. Where possible spray directly into the nests. Use the low rate for maintenance treatments or to control light infestations and the high rate for heavy infestations and maximum residual control. The elimination of funnel ants from a particular site will generally require more than one application. Initial applications should be broadcast over affected areas. As the initial number of active colonies is reduced, application should shift to targeting active mounds. Apply spray directly to the mounds and in the area immediately surrounding active mounds (300mm radius). To aid in even coverage a minimum spray volume of 200L/ha (2L/100m²) is recommended.

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

GENERAL INSTRUCTIONS

GROUP 3A INSECTICIDE

Biff is a contact and residual insecticide/miticide. it can be used as a protective treatment when applied at regular intervals or as a knockdown treatment to control existing pests. Best results are obtained when Biff is applied before pest populations build up to damaging levels. Insecticide Resistance Warning – For insecticide resistance management, Biff is a Group 3A insecticide. Some naturally occurring insect biotypes resistant to Biff and other Group 3A insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Biff and other Group 3A insecticides are used repeatedly. The effectiveness of Biff on resistant individuals could be signifi cantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use. Colin Campbell (Chemicals) Pty Ltd, accepts no liability for any losses they may result from the failure of Biff to control resistant insects. Biff may be subject to specific resistance management strategies. For further information contact your local supplier. Colin Campbell (Chemicals) Pty Ltd, representative or local agricultural department agronomist.

Re-entry Period – Do not allow re-entry into treated areas until the spray deposits have dried or have been watered in after treatment. When prior entry is necessary, wear suitable protective clothing (i.e. waterproof boots, overalls and gloves). Clothing must be washed after each day's use.

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Application – Biff is a suspension concentrate requiring dilution with water prior to use. Applications should be made with equipment calibrated to deliver a fi ne dilute spray in a suitable volume to ensure thorough coverage. Use suitable application equipment and preferably cone nozzle combinations to deliver appropriate spray volume and droplet size of 150 to 200 microns. DO NOT apply as a fog or mist.

Mixing – Add the required quantity of Biff to water in the spray tank and mix thoroughly. Maintain agitation during mixing and application.

Compatibility – Biff is compatible with commonly used fungicides. Do not mix with alkaline materials.

Surfactants – Biff contains a surfactant. Additional surfactant may be necessary on hard to wet plants and high volume situations.

PROTECTION OF WILDLIFE, FISH, CRUSTACEA AND THE ENVIRONMENT – Dangerous to fi sh and other aquatic organisms. DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

PROTECTION LIVESTOCK – Dangerous to bees. DO NOT spray any plants in fl ower when bees are foraging Spray in the night or early morning when bees are not actively foraging.

STORAGE, SPILLAGE AND DISPOSAL – Store in the closed, original container in a cool, well-ventilated area away from children, animals, food and feedstuffs. Do not store for prolonged periods in direct sunlight. In case of spillage, confi ne and absorb spilled product with absorbent material such as sand, clay or cat litter. Dispose of waste as indicated below or according to Australian Standard AS2507 – Storage and Handling of Pesticides. DO NOT allow spilled product to enter sewers, drains, creeks or any other waterways. Triple or preferable pressure 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. If not recycling break, crush, or puncture and bury empty containers in a local authority landfi II. If no landfi II is available, bury the containers below 500mm in a disposal pit specifi cally marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

SAFETY DIRECTIONS – Poisonous if swallowed. Will irritate the eyes. Avoid contact with eyes and skin. When opening the container and preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length PVC or nitrile gloves and a half-face respirator. Wash hands after use. After each day's use, wash gloves, contaminated clothing and respirator and, if rubber, wash with detergent and warm water.

FIRST AID – If poisoning occurs, contact a doctor or Poisons Information Centre, Phone Australia 13 11 26.

MATERIAL SAFETY DATA SHEET – Further information can be obtained from the Material Safety Data Sheet.

CONDITIONS OF SALE

Agricultural, horticultural and pastoral preparations in their application involve varying factors such as differing conditions, soil, climate and methods of application over which the vendor does not have control, Whilst Colin Campbell (Chemicals) Pty. Ltd believes that all goods sold by it are true to label and are effective and safe for purpose indicated the company and the seller hereby expressly negate and exclude any express or implied condition, statement or warranty, statutory or otherwise, as to quality or fitness of any goods sold for any purpose or purposes whatsoever except such warranties and conditions, if any, as are implied by the Trade Practices Act 1974 (Commonwealth). The company and the seller accept no responsibility for any loss, harm or damage whatsoever suffered from the use of such goods for any purpose or purposes irrespective of whether or not the buyer was acting in reliance upon the advice recommendation or representation of the seller or any representative agent of employee of the company as to such use except in respect of breaches of conditions and warranties, if any, implied by the Trade practices Act and in respect of such breaches the liability of the company and the seller shall be limited to the replacement of the goods or the supply of equivalent goods, or the payment of the cost of replacing the goods.

THIS PRODUCT IS NOT A DANGEROUS GOOD FOR TRANSPORT AND STORAGE IN AUSTRALIA. APVMA Approval No: 63190

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