

POISON

**KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING**

**DAVID GRAYS
CARBARYL 500 FLOWABLE
INSECTICIDE**

**ACTIVE CONSTITUENT : 500g/L CARBARYL
(an anticholinesterase compound)**

GROUP	1A	INSECTICIDE
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For the control of certain insects in Fruits, Nuts, Vegetable, Crops and Pastures, and for certain other uses as specified in the Directions for Use table.

**20 LITRES
5 LITRES
1 LITRE**

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**Infopest verifies that this label is consistent with the NRA
Approved Text Label of (date)**

DAVID GRAYS
CARBARYL 500 FLOWABLE
INSECTICIDE

Active Constituent: 500g/L Carbaryl (An Anticholinesterase compound)

FORMULATION: David Grays Carbaryl 500 Flowable Insecticide is a shake and pour formulation, which is non-flammable, flowable liquid, which is white in colour. It contains no petroleum solvents.

MIXING: Shake well before use. Slowly add the required amount of this product to the water in the spray tank under agitation.

When using as a tank mix with Spray Oils, add the product AFTER thoroughly mixing the oil with water in the spray tank

GENERAL INSTRUCTIONS:

Insecticidal Resistance Warning:

GROUP	1A	INSECTICIDE
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For insecticidal resistance management, David Grays Carbaryl 500 Flowable Insecticide is a Group 1A Insecticide.

Some naturally occurring insect biotypes resistant to David Grays 500 Flowable Insecticides and other Group 1A insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if David Grays Carbaryl 500 Flowable Insecticide or other Group 1A insecticides are used repeatedly. The effectiveness of David Grays Carbaryl 500 Flowable Insecticide on resistant individuals could be significantly reduced. Since occurrence on resistant individuals is difficult to detect prior to use, David Grays & Co. Pty. Ltd. accepts no liability for any losses that may result from the failure of David Grays Carbaryl 500 Flowable Insecticide to control resistant insects.

David Grays Carbaryl 500 Flowable Insecticide may be subject to specific resistance management strategies. For further information contact your local supplier David Gray & Co. Pty. Ltd. representative or local agricultural department agronomist.

COMPATIBILITY: David Grays Carbaryl 500 Flowable Insecticide may be combined in the spray vat with any of the following formulated compounds-Copper-oxychloride, Maldison, Mancozeb, Parathion-methyl, Pirimicarb, Pirimiphos-methyl, Propargite, Surfactant, Thiram, Ziram. A mixture of David Grays Carbaryl 500 Flowable Insecticide with more than one of these products or with any other product may be ineffective or may cause serious damage. The use of such a mixture is not recommended and would therefore be entirely at the user's risk. DO NOT apply in combination with summer oil on apples and pears. Combinations with Borax should be used immediately after preparation. DO NOT use with highly alkaline materials such as Bordeaux mixture or lime sulphur. Residues can affect colouring of red varieties. The efficacy of and plant tolerance to David Grays Carbaryl 500 Flowable Insecticide applied alone or in combination with compatible products may be affected by climatic conditions during and after application. David Grays Carbaryl 500 Flowable Insecticide or such combinations should not be applied during abnormally hot, cold and slow drying conditions.

DAVID GRAYS CARBARYL 500 FLOWABLE INSECTICIDE Cont.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS:

DO NOT apply under meteorological conditions or from spraying equipment, which could be expected to cause spray drift onto nearby plants, adjacent crops, croplands or pastures.

PROTECTION OF WILDLIFE, FISH, CRUSTACEA AND ENVIRONMENT: DO NOT

contaminate streams, rivers or waterways with the chemical or used containers.

PROTECTION OF LIVESTOCK: Dangerous to bees. DO NOT spray any plants in flower while bees are foraging.

STORAGE AND DISPOSAL: Store in the closed, original container in a cool, well-ventilated area away from children, animals, food, feedstuffs, seed and fertilisers. DO NOT store for prolonged periods in direct sunlight. Triple (or preferably) pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. Break, crush or puncture and bury empty containers in a local authority landfill. If not available bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and roots. Empty containers and product should not be burnt not be burnt.

SAFETY DIRECTIONS: Product is poisonous if absorbed by skin contact or swallowed. Avoid contact with eyes and skin. DO NOT inhale spray mist. When preparing the spray wear elbow length PVC gloves. If product on skin, immediately wash area with soap and water. 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.

FIRST AID: If poisoning occurs, contact a doctor or Poisons Information Centre. Phone. 131126.

If swallowed, give one atropine tablet every 5 minutes until dryness of the mouth occurs – **If poisoned by skin absorption or through lungs**, remove any contaminated clothing, wash skin thoroughly and give atropine tablets as above. Get To a doctor or hospital quickly.

More information is available on Material Safety Data Sheet on request from David Gray & Co. Pty. Ltd.

LIMITATION OF LIABILITY: This product is designed for the particular purposes indicated on this label. Failure to use the product strictly as directed may be illegal, prove dangerous, render the product ineffective and avoid any Warranty or Liability of David Gray & Co. Pty. Ltd.

NRA Approval No 52213/0100

IN A TRANSPORT EMERGENCY DIAL 000 POLICE or FIRE BRIGADE

DIRECTIONS FOR USE:

FRUIT & VEGETABLES

CROP/ SITUATION	PEST/INSECT	STATE	RATE	W.H.P.	CRITICAL COMMENTS
Beans and Cucurbits	Budworms, Pumpkin Beetle, 28 Spotted Lady Bird	Qld WA only	2L/ha per 100L water	3 Days to harvest	Spray when infestation and pest activity is first observed and thereafter as necessary.
Citrus	White Wax Scale Pink Wax Scale.	NSW Qld WA only	140ml & 1L Summer Oil/100L spray oil/100L water		Spray trees thoroughly to run off (dripping) in late November to early December and again in late January and early February. Add oil to water in vat before David Grays Carbaryl 500 Flowable Insecticide.
	Orange Fruit Borer	NSW Vic SA WA Qld only	160ml - 200ml/100L water		Apply at first sign of pest activity and repeat at intervals of 2 weeks or as necessary. Use higher rate when insect pressure is high.
	Light Brown Apple Moth. Yellow Peach Moth	All states			
Spined Citrus Bug Bronze Orange Bug.	Qld only	100ml/100L water			
Duboisia	Cluster Caterpillar. Sandal-box Hawk Moth, Leafeating LadyBird, Australian Plague Locust Grasshoppers.	Qld WA only	200ml/100L water or 2.2L/ha	1 Day	Apply when pests appear and repeat as necessary.
Grapes	Light Brown Apple Moth, GrapeVine Moth, Grape Leaf Blister Mite, and GrapeVine Hawk Moth.	All States	160ml - 200ml/100L water	3 Days to harvest	Apply at first sign of pest activity and repeat at 2 week intervals if necessary. Use higher rates when insect pressure is high.
Kiwi Fruit	Light Brown Apple Moth.	Vic WA only	160- 200ml/100L water	3 Days	Apply when pest appears and repeat as necessary. Apply higher rate at 7-10 day intervals when pests are present.
Macadamia	Macadamia Nut Borer, Cornelian (Butterfly), Yellow Peach Moth, Macadamia Twig- Girdler, Macadamia Nut Moth.	Qld WA only	200ml/100L water or 2.2L/ha	-	Apply as a preventative spray after moths have been flighting.
Mangoes	Fig Leaf Hopper		200ml/100L water	3 Days	Apply when large population appear on leaf stalks (Oct-Nov)
	Pink Wax Scale, Flatid Planthoppers		140ml/100L water		

DIRECTIONS FOR USE

Fruit & Vegetables

CROP/ SITUATION	PEST/INSECT	STATE	RATE	W.H.P.	CRITICAL COMMENTS	
POME FRUITS Apples, Pears	Codling Moth, Light Brown Apple Moth, Pearleaf Blister Mite.	All States	160ml - 200ml/100L water	3 Days to harvest	Apply at intervals at 3 weeks commencing with the emergence of the first adults in spring. Do not apply to apples and pears within 4 weeks after full bloom if reduction in fruit set is to be avoided.	
	Fruit Thinning	All states	160-200ml per 100L water	3 Days	A careful appraisal of all factors likely to thin the crop should be made before spraying. If reduction in fruit set is desired apply between 7-28 days after full bloom.	
Potatoes	Potato Moth	All States	2.2L/ha or 200ml/100L water	3 Days	Apply in sufficient water to obtain good coverage, commencing at first sign of moth activity one or two further sprays at 3-4 week intervals maybe required.	
STONE FRUIT Peaches, Apricots Nectarines, Plums, Prunes	Light Brown Apple Moth, Oriental Fruit Moth, Green Tree Hopper, Pear and Cherry Slug	All states	160ml - 200ml/100L water	3 Days	Apply at peak emergence of oriental fruit moth as determined by lure counts, or as soon as pest activity becomes evident, and there after at 2-4 week intervals or as required.	
	Tomatoes				Tomato Leaf Miner	Apply at first sign of attack and then spray as necessary. Spray to point of wetness.
Vegetables – General	Potato Moth, European Earwig, Cabbage White Butterfly, Green Vegetable Bug, Heliothis	Qld NSW Vic SA WA only	160 - 200ml/100L water or 1.8 - 2.2L/ha	3 Days to harvest	Apply when pests appear and repeat as necessary. Use higher rate when insect pressure is high NB Tender foliage of watermelons may be injured when high humidity or rain prevails for several days.	
	Rutherglen Bug,	All states				
	Cabbage Moth	Vic SA NSW WA only				3 Days
	Pumpkin Beetle, Leaf Eating Ladybird, Cutworms	Vic Qld SA WA NSW only				3 Days
	Wingless Grasshoppers	Vic WA only				160 – 200ml/100L water or 1.8 – 2.2L/ha

DIRECTIONS FOR USE Cont
FIELD CROPS & PASTURES

CROP/ SITUATION	PEST/ INSECT	STATE	RATE	W.H.P.	CRITICAL COMMENTS
Cereals Sorghum Sunflower	Rutherglen Bug, Heliothis Spp. Army- Worm, Cutworms	NSW Vic SA WA Qld only	160 - 200ml/100L water or 1.8 - 2.2L/ha	1 grazing day	Apply at first sign pest activity.
Linseed	Heliothis Spp.	Qld WA only	200ml/100L water or 2.2L/ha	3 Days	Apply at first sign of pest activity and then as necessary.
Lucerne	Lucerne Leafroller	NSW Qld Vic Tas SA WA only	1.7 – 1.8L/ha	1 Day before grazing	Apply at first sign of pest activity. Repeat as necessary. Ensure full coverage.
	Sitona Weevil	NSW Vic SA WA only	1.8L/ha		
	Leaf Hoppers & Budworms	NSW Vic SA WA Qld only	2.2L/ha		
	Lucerne Flea	NSW Vic SA WA only	500ml/ha		
Pastures, Pasture Seed Crops	Grass Caterpillar	Qld WA only	1.1L/ha	1 Day before grazing	Apply when pest appears and repeat as necessary.
	Yellow Winged Locust Migratory Locust		1.2 or 1.4L per ha		Apply when pest appears and repeat as necessary.
	Australian Plague Locust	Qld SA WA only			Use higher rate for adult locusts or when pressure is high.
	Pasture Cockchafer (Aphodius tasmaniae)	Vic SA Tas WA only	2.2L/ha		Apply 4 weeks after opening rains.
	Army Worm Budworm (Heliothis)	Vic SA WA only			Spray at first sign of infestation and repeat as necessary.

**MISCELLANEOUS
CROP SITUATION**

CROP/ SITUATION	(PEST) (INSECT)	STATE	RATE	W.H.P.	CRITICAL COMMENTS
Cereal Grain: Storage up to 3 months (except Malting Barley).	Lesser Grain Borer (Rhyzopertha dominica)	Vic Qld NSW Tas SA only	10ml/L per tonne of grain	*Cereal Grain treated with 16ml of this preparation should be held in store and should not be used for processing into food for human consumption or for stock food within 90 days of use.	Non aerated storages. Apply to raw cereal grain at rate recommended by means of standard grain spraying machinery, following dilution to a concentration appropriate to the equipment on hand and the conditions pertaining. Appropriate adjustments are to be made for treatment of grain storages below 30°C or in aerated storages. Do not apply to barley for malting.
Cereal, Grain storage from 3 months up to 9 months (except Malting Barley).		In WA use is restricted to Grain Handling Authorities only.	16ml/L per tonne of grain		
Disinfestation of Grain Storage Buildings. General. Non-crop commercial and industrial areas			10ml/L per 10 square metres		Spray to run off on all types of surfaces.
	European Earwigs	All states	80ml/15L. Knapsack application	-	Spray liberally on exterior walls of houses and outbuildings. Cover also boundary fences and breeding places such as woodpiles and rockeries.
	Grasshoppers	Qld Vic SA WA Tas only	1.1 -1.4L per 100L water		For treatment of swarms by high volume ground equipment. Use sufficient volume of water to get a good coverage, usually between 220-1100 litres to each hectare.
	Plague Locusts Wingless Grasshoppers	SA only			

DIRECTIONS FOR USE Cont.
MISCELLANEOUS
PESTS GENERAL

CROP/ SITUATION	(PEST) (INSECT)	STATE	RATE	W.H.P.	CRITICAL COMMENTS
Industrial Domestic Areas	Ants, Moths, Fleas	Qld Vic Tas SA WA only	2.2L/100L water	-	Spray thoroughly all surfaces to be treated. Do not use as a space spray.
	European Earwigs	All states	80ml/15L water knapsack		
	Vespid Wasps (English/ European Wasps)	Vic SA WA only	130-320 ml/L water	-	Pour or squirt down the entrance to underground nests or spray semi-concealed nests. Apply at night and wear protective clothing and veil to avoid stings.
	Honey Bees		1.1L/100L water		Spray into nests in the open and in enclosed cavities where the nest is close to the entrance used by the bees. Destroy the nest if accessible. Do not use honeycomb – destroy or bury it. Apply at night and wear protective clothing and veil to avoid stings.
Ornamentals	Tobacco Leaf Miner, Potato Moth, European Earwig, Cabbage White Butterfly, Rutherglen Bug, Green Vegetable Bug, Leafeating Ladybird, Heliothios, Pumpkin Beetle, Cutworms	NSW Vic SA WA Qld only	200ml/100L water or 2.2L/ha	-	Apply when pests appear as necessary. NOTE: Because of the wide range of ornamentals and their pests, phytotoxicity and efficacy of this product can not be guaranteed, so use a small test area before widespread use.
	Wingless Grasshoppers	Qld Vic SA WA Tas only	175ml/100L water		
Tobacco Bulk Sheds	Tobacco Beetle	Qld NT WA only	200ml/10L	-	Spray all surfaces. Apply 5L of prepared spray per 100 square metres.

WITHOLDING PERIOD:

CEREALS, SUNFLOWERS, PASTURES and LUCERNE: DO NOT graze or cut for stock food for 1 day after application.

FRUIT AND VEGETABLES: DO NOT APPLY LATER THAN 3 DAYS BEFORE HARVEST.

IMPORTANT:

Several days of high humidity or rain after spraying may result in some damage to tender foilage.

PRECAUTIONS – POME FRUIT:

DO NOT use on Quinces. DO NOT use on McIntosh and York varieties of apples. DO NOT apply to Delicious and Williams Favourite apples before, during and shortly after frost as russet may occur. DO NOT apply in combination with summer oil on apples and pears as fruit spotting may occur.

FRUIT THINNING:

Application may cause russet to Delicious and Williams Favourite when applied before, during or after frost. Some leaf burn may occur on tender foilage if humidity is very high for several days after application. Residues can affext colouring of red varieties.

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