

Product Name: FYFANON 440 EW INSECTICIDE
APVMA Approval No: 51150/132266



Label Name:	FYFANON 440 EW INSECTICIDE
Signal Headings:	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Constituent Statements:	ACTIVE CONSTITUENT: 440 g/L MALATHION
Mode of Action:	GROUP 1B INSECTICIDE
Statement of Claims:	For the control of a wide range of insect pests in certain crops, eucalypts and wildflowers as shown under Directions for Use.
Net Contents:	1-1000L
Restraints:	
Directions for Use:	This section contains file attachment.
Other Limitations:	
Withholding Periods:	CEREAL CROPS, LUCERNE, PASTURE: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 1 DAY AFTER APPLICATION FRUIT AND VEGETABLES EXCEPT CUCUMBERS: DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION

	<p>CUCUMBERS: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION</p> <p>STORED CEREAL GRAIN - 12 PPM: HOLD GRAIN IN STORE AND DO NOT USE FOR PROCESSING INTO FOOD FOR HUMAN CONSUMPTION OR STOCK FOOD UNTIL THE MALDISON LEVEL HAS DECLINED TO 8 PPM OR WITHIN 90 DAYS AFTER TREATMENT</p> <p>RICE (COMMON ARMYWORM): DO NOT HARVEST FOR 1 DAY AFTER APPLICATION.</p>
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Trade Advice:	<p>EXPORT OF TREATED PRODUCE: Treated crop commodities destined for export may require extra time between application and harvest to be accepted in some export markets. Before you use this product, you are advised to contact FMC Australasia Pty Ltd and/or your industry body about any potential trade issues and their management.</p>
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General Instructions:	<p>This section contains file attachment.</p>
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Resistance Warning:	<p>Insecticide Resistance Warning Group 1B Insecticide</p> <p>For insecticide resistance management Fyfanon 440 EW Insecticide is a Group 1B insecticide. Some naturally occurring insect biotypes resistant to Fyfanon 440 EW and other Group 1B insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Fyfanon 440 EW or other Group 1B insecticides are used repeatedly. The effectiveness of Fyfanon 440 EW on resistant individuals could be significantly reduced. Since the occurrence of resistant individuals is difficult to detect prior to use, FMC Australasia Pty Ltd accepts no liability for any losses that may result from the failure of Fyfanon 440 EW to control resistant insects. Fyfanon 440 EW may be subject to specific resistance management strategies. For further information contact your local supplier, FMC Australasia Pty Ltd representative or local agricultural department agronomist. Read Directions for Use, Precautionary Statements, Safety Directions and First Aid instructions prior to opening. Use only at the recommended growth stages. Use only on recommended crops.</p>
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Precautions:	<p>PRECAUTIONS Avoid contact with food, food utensils, or places where food is prepared or stored.</p> <p>RE-ENTRY PERIOD DO NOT allow entry into treated areas until the spray has dried. When prior entry is necessary, wear cotton overalls buttoned to the neck and wrist and a washable hat and chemical resistant gloves. Clothing must be laundered after each day's use.</p>
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Protections:	<p>PROTECTION OF LIVESTOCK Dangerous to bees. DO NOT spray on any plants in flower while bees are foraging.</p> <p>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT DO NOT apply under meteorological conditions or from spraying equipment which could be expected to cause spray to drift onto adjacent areas, particularly wetlands, waterbodies or watercourses. Dangerous to fish and aquatic invertebrates. DO NOT contaminate streams, rivers or waterways with the chemical or used containers.</p>
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Storage and Disposal:	<p>Store in the closed original container in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight.</p> <p>Triple 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 packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.</p> <p>Refillable containers: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.</p>
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Safety Directions:	<p>May irritate the eyes and skin. Avoid contact with eyes and skin. Repeated exposure may cause allergic disorders. When opening the container and preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist, a washable hat and elbow-length PVC gloves. Wash hands after use. After each day's use, wash gloves and contaminated clothing.</p>
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First Aid Instructions:	<p>If swallowed, splashed on skin or in eyes, or inhaled, contact a Poisons Information Centre Phone Australia 131126 or a doctor at once. Remove any contaminated clothing and wash skin thoroughly. If swallowed, activated charcoal may be advised. Give atropine if instructed.</p>
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First Aid Warnings:	
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DIRECTIONS FOR USE:**1. Tree and Vine crops**

This table shows rates for dilute spraying. For concentrate spraying, refer to the Mixing/Application section.

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CROP	PEST	STATE	RATE	WHP	CRITICAL COMMENTS	
Apples, Pears	Apple leaf hopper, Codling moth, Red spider mite, Thrips, Woolly aphid	NSW, ACT, Vic, SA, WA only	140 mL/100 L	3 days	Apply at first sign of pest.	
	Apple leaf hopper, Codling moth, European red mite, Woolly aphid	Tas, WA only				
Citrus	Purple scale, Red scale, Soft brown scale	NSW, ACT, Vic, SA, WA, NT only	230 mL/100 L Plus 1.3 L summer oil/ 100 L		Apply November-March. For best results apply twice; November-January and then early February.	
	Pink wax scale				Apply December-early January or when crawlers are active.	
	Purple scale, Soft brown scale	Tas, WA only			Apply November-March, with two applications, the first November-January and the second in February. Early application gives best results.	
		Bronze orange bug, Citrus aphid, Citrus butterfly, Rutherglen bug, Spined citrus bug, Tree hopper, Thrips	NSW, ACT, Vic, SA, WA only		140 mL/100 L	Apply as necessary.
		Citrus aphid, Rutherglen bug, Tree hopper, Thrips	Tas, WA only			
Grapevines	Mealy bug	NSW, ACT, Vic, Tas, SA, WA, only	230 mL/100 L		Apply when pests appear and repeat if pest population increases. For application during summer months if scale population increases.	
	Vine moth		140 mL/100 L			
	Grape vine scale		230 mL/100 L Plus 1.3 L summer oil/100 L			
Stone Fruit	Black peach aphid, Green peach aphid, European red mite, Oriental fruit moth		140 mL/100 L		Apply at first sign of pest and repeat as necessary. Warning: Some Green Peach Aphid populations may be resistant to organophosphate insecticides, and therefore WILL NOT be controlled by FYFANON® 440 EW	

2. Field crops and pasture

CROP/ SITUATION	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
Canola	Rutherglen bug	Vic, SA only	1.25 L/ha	-	Apply at first sign of pest, repeat every 7-10 days as necessary.
Cereals, Non-Crop Areas, Pastures	Plague locust, Small hoppers	NSW, ACT, SA, WA only	1.4 L/ha	1 day	Ground application only <u>Boom</u> apply in 110 L water/ha <u>Misting</u> apply in 2.5 L water/ha. Repeat as necessary.
		Vic only	2.5 L/ha		
	Large hoppers, Plague locust	NSW, ACT, SA, WA only	1.9 L/ha		
		Vic only	2.5 L/ha		
Cereals, Non-Crop Areas, Pastures <i>continued</i>	Field cricket (<i>Teleogryllus commodus</i>)	Vic, Tas, SA, WA only	Bait 285 mL/10 kg kibbled grain/ha	1 day	Immature crickets
			Bait 285-570 mL/10-20 kg kibbled grain/ha		Mature crickets Use higher rate for heavy infestations. Mix in a drum or cement mixer and keep 24 hours before spreading. Spread in late afternoon and evening early in the season, and morning late in the season. Baiting may be ineffective if large amounts of pasture seed are present.
			Spray 1.6 L/25-50 L		Apply in evening. Ensure pasture cover is low so chemical will come into direct contact with crickets. Spraying may be ineffective if cold conditions keep crickets underground for 1-2 days, or if rain falls after application.
Lucerne	Lucerne flea	NSW, ACT, Vic, Tas, SA only	160-340 mL/ha		Apply by low volume equipment with sufficient water to ensure good coverage at 3-4 weekly intervals after opening rains. Vary rate according to stage of growth.
	Spotted alfalfa aphid	NSW, ACT, SA only	1.25 L/ha		Apply at first sign of pest. Use sufficient water to ensure thorough coverage.
	Pea aphid	Vic only			Immature crickets
	Field cricket (<i>Teleogryllus commodus</i>)		Bait 285 mL/10 kg kibbled grain/ha		Mature crickets: Use higher rate for heavy infestations. Mix in a drum or cement mixer and keep 24 hours before spreading. Spread in late afternoon and evening early in the season, and morning late in the season. Baiting may be ineffective if large amounts of pasture seed are present.
			Bait 285-570 mL/10-20 kg kibbled grain/ha		
Pastures	Spotted alfalfa aphid	NSW, ACT, SA, WA only	1.25 L/ha		Apply in evening. Ensure pasture cover is low so chemical will come into direct contact with crickets. Spraying may be ineffective if cold conditions keep crickets underground for 1 - 2 days, or if rain falls after application.
					Apply at first sign of pest. Use sufficient water to ensure thorough coverage.

CROP/ SITUATION	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
Rice	Rice bloodworm larvae	NSW, ACT, WA only	680 mL/ 10 - 30 L/ha	-	Apply by aircraft to rice bays at or within 24 hours of sowing, or when infestations occur after application of permanent water.
	Common armyworm	Qld NSW, ACT, Vic only	1.8 L/ha	1 day	When infestation is widespread, spray total crop. When infestation is moving as an army, spray the front.

3. Vegetable crops

CROP	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
Cucurbits	Pumpkin beetle	NSW, ACT, Vic, SA, WA only	140-230 mL /100 L	3 days	Apply as necessary.
Tomatoes	Tomato russet mite	NSW, ACT, Vic, Tas, SA, WA, NT only			Apply at first sign of pest and repeat as necessary.
Vegetables (Bean, Cabbage, Carrot, Cauliflower, Celery, Cucurbit, Lettuce, Tomato)	Aphid, Green vegetable bug, Jassid, Leaf hopper, Red legged earth mite (not Tas), Rutherglen bug, Twentyeight-spotted ladybird (not Tas)	All states			Apply at first sign of pest. Ensure adequate coverage in later growth stages by increasing rate and volume. WARNING Some Green peach aphid populations may be resistant to organophosphate insecticides, and therefore WILL NOT be controlled by Fyfanon® 440 EW

4. Fruit and Vegetables – Fruit Fly

CROP	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
To effectively manage fruit fly, a multi- faceted approach should be used. Fyfanon® 440 EW assists in the management of fruit flies as part of an integrated program that includes other registered insecticides, baiting, trapping, pest monitoring, and orchard hygiene. The efficacy of the multi-faceted approach will be dependent upon the level of pest pressure during the season.					
Apples, Pears	Fruit fly	All states	140 – 230 mL/ 100 L	3 days	<p>Apply treatment when fruit fly activity is initially observed, as determined by regular monitoring and fruit fly trapping. Apply as a thorough cover spray to the point of run-off.</p> <p>DO NOT spray on any plants in flower while bees are foraging.</p> <p>Strawberries, Blueberries, Rubus and Ribes Apply a maximum of 6 applications per season, with a minimum of 7 days between consecutive (repeat) sprays.</p> <p>Other crops Apply a maximum of 4 applications per season, with a minimum of 7 days between consecutive (repeat) sprays.</p>
Citrus					
Grapevines			295 mL/100 L		
Persimmons					
Stone fruit					
Strawberries, Blueberries, Rubus and Ribes					
Capsicum, Tomato					
Cucumbers				1 day	
Fruit trees	Fruit fly	All states	<p>Bait 700 mL/100 L plus a yeast autolysate or hydrolysate protein bait at recommended rates.</p>	3 days	<p>Apply as a lower pressure coarse foliar, spot or strip spray throughout the orchard or in fruit fly hot spots.</p> <p>For foliar and strip spraying apply in a volume of 5 – 20 L/ha of bait solution.</p> <p>For spot spraying, apply 100 - 150 spots/ha at 50 – 100 mL/spot of bait solution.</p> <p>Only apply to leaves, trunk and lower limbs of trees.</p> <p>Apply weekly from 6 weeks before harvest to 2 weeks after harvest.</p> <p>If rain occurs after application, reapply as soon as possible after the rain event.</p> <p>DO NOT apply directly to fruit.</p> <p>DO NOT spray trees when bees are foraging.</p> <p>DO NOT use the bait treatment as a broadcast or cover spray.</p>
Blueberries, Rubus & Ribes and Strawberries			<p>Bait 700 mL/100 L plus a yeast autolysate or hydrolysate protein bait at recommended rates.</p>	3 days	<p>Apply only to perimeter non-crop vegetation and fruit fly resting sites.</p> <p>Apply as a low pressure coarse foliar, spot or strip spray.</p> <p>For foliar and strip spraying, apply in a volume of 5 - 20 L/ha of bait solution.</p> <p>For spot spraying, apply 100 - 150 spots/ha at 50 - 100 mL/spot of bait solution.</p> <p>Apply weekly from 6 weeks before harvest.</p> <p>If rain occurs after application, reapply as soon as possible after the rain event.</p> <p>DO NOT apply to plants or fruit directly.</p> <p>DO NOT spray plants when bees are foraging. DO NOT use the bait treatment as a broadcast or cover spray.</p> <p>Do not exceed recommended rates of Fyfanon 440 EW and yeast autolysate protein to avoid phytotoxicity.</p>

5. Stored cereal grain

CROP/ SITUATION	PEST	STATE	RATE	WHP	CRITICAL COMMENTS
Stored Cereal Grain, Grain Storage Facilities and Equipment	Stored grain insect pests (except Lesser grain borer) including: Indian meal moth, Rice weevil, Rust-red flour beetle, Saw-toothed grain beetle, Tropical warehouse moth	WA only	5.7 L/100 L (10 L prepared spray/ 200 m ² surface)	Maldison level 8 ppm or 90 days	Apply prepared spray to the walls, floors, roof structure, machinery, transport vehicles and areas surrounding storage facilities . Use as a routine hygiene procedure before grain is stored in any facility. Prevent surface contamination of grain. DO NOT apply more than at 2 monthly intervals in warm weather and 3 monthly intervals in winter.
			2.7 L/100 L (12 ppm) (1 L prepared spray/ tonne grain)		For up to 6 months protection apply to the grain as it is being transferred into storage . Ensure the use of suitable equipment to give an even coverage to the grain and which will adjust to the flow rate of the grain.
			56 mL/ L (5 L prepared spray/ 100 m ²)		At 3 monthly intervals apply to the surface of the stored grain .

6. Miscellaneous

CROP/ SITUATION	PEST	STATE	RATE	CRITICAL COMMENTS
Animal Quarters	Fleas, flies, ticks	All States	11.5 mL/ L (50 g sugar may be added per 1 L of spray as a bait for fly control)	Apply thoroughly to animal houses such as stables, kennels, and bedding using 1 L of diluted spray per 20 m ² of area. Good basic sanitation is necessary for a successful fly control program. Remove manure piles and other waste materials which act as breeding sites.
Dairies, Stables, Factories, Homes	Flies		2.3 L/100 L	Treat surface where flies congregate such as walls, ceilings, stanchions, windows, etc. Repeat as required.
Poultry and Pig Sheds	Common hide beetle (<i>Dermestes maculatus</i>)		6.8 L/100 L Spray 5 L of solution to 100 m ²	Ensure proper sanitation and run-off.
Eucalypts, Natives	Autumn gum moth, Gumleaf skeletoniser, Leaf beetle, Spitfire, Spring beetle	SA, WA, NT only	340 mL plus 125 mL activator/ 100 L	When mixing with alkaline water, use 500 mL of LI700 per 100 L instead of activator.
	Scale insects		195 mL plus 3.3 L white oil/ 100 L	Ensure thorough coverage.
Flowers, Ornamentals	Aphid, Azalea lace bug, Mites	NSW, ACT, Vic, Tas, SA, WA, NT only	140 mL/100 L	Apply at first sign of pest, repeat every 7-10 days as necessary.
	Scale on hardy plants		230 mL/100 L plus 1.3 L summer oil/ 100 L	
Wildflowers, Proteas	Aphid, Leaf hopper, Sucking bugs, Thrips	SA, WA only	115 mL/100 L	Ensure thorough coverage.
	Grasshoppers		Spray 570 mL/100 L Bait 55 mL/1 kg bran	Mix bait in a plastic bag. Leave overnight. Spread thoroughly.

CROP/ SITUATION	PEST	STATE	RATE	CRITICAL COMMENTS
Mosquitoes breeding areas	Adults	All States	680 mL/ha	Dilute with water as required. Apply by pressure spray or misting machine. Treat verges of infested waterways: ensure thorough coverage. Apply at first sign of larvae or major emergence of adults. Repeat if further outbreaks occur.
	Larvae		1.1 L/ha	
Tobacco Seed bed Field	Brown vegetable weevil, Springtails	Vic, WA only	115 mL/100 L	Apply the spray to tobacco in seed-bed when the insects are present. Repeat application of the spray at 7 - 10 day intervals if necessary to control the insects. Ensure thorough coverage.
	Small plague wingless grasshopper			

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

GENERAL INSTRUCTIONS

MIXING/APPLICATION

Add the recommended quantity of this product to the required volume of water, mix thoroughly.

DILUTE SPRAYING (Tree and Vine Crops only)

Use a sprayer designed to apply high volumes of water up to the point of runoff and matched to the crop being sprayed. Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to the point of run-off. Avoid excessive run-off. The required water volume may be determined by applying different test volumes, using different settings on the sprayer, from industry guidelines or expert advice.

Add the amount of product specified in the Directions for Use table for each 100 L of water. Spray to the point of run-off. The required dilute spray volume will change unless otherwise specified and the sprayer set up and operation may also need to be changed, as the crop grows.

CONCENTRATE SPRAYING (Tree and Vine Crops only)

- a) Use a sprayer designed and set up for concentrate spraying (that is a sprayer which applies water volumes less than those required to reach the point of run-off) and matched to the crop being sprayed.
- b) Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen water volume.
- c) Determine an appropriate dilute spray volume (See Dilute Spraying above) for the crop canopy. This is needed to calculate the concentrate mixing rate.
- d) The mixing rate for concentrate spraying can then be calculated in the following way:

EXAMPLE ONLY

- (i) Dilute spray volume as determined above: For example 1500 L/ha
 - (ii) Your chosen concentrate spray volume: For example 500 L/ha
 - (iii) The concentration factor in this example is: $3 \times$ (i.e. $1500 \text{ L} \div 500 \text{ L} = 3$)
 - (iv) If the dilute label rate is 10 mL/100 L, then the concentrate rate becomes 3×10 , that is 30 mL/100 L of concentrate spray.
- e) The chosen spray volume, amount of product per 100 L of water, and the sprayer set up and operation may need to be changed as the crop grows.
 - f) For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

MIXING

Add the recommended quantity of this product to the required volume of water, mix thoroughly.
