

CAUTION

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



CARFENTRAZONE 240 EW

Herbicide

ACTIVE CONSTITUENT:
240 g/L CARFENTRAZONE-ETHYL
SOLVENT: 250 g/L LIQUID HYDROCARBON

GROUP G HERBICIDE

For the control of certain annual broadleaf weeds
in winter cereals as per the Directions For Use Table.

**READ THIS INFORMATION THOROUGHLY
BEFORE USING THIS PRODUCT**

4 Farmers Australia Pty Ltd

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Batch Number:

Date of Manufacture:

APVMA Approval No: 88083/120231

In a Transport Emergency Dial 000 Police or Fire Brigade	Special Poisons Advice: 13 11 26
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RESTRAINTS

DO NOT tank mix 4Farmers Carfentrazone 240 with any wetter, crop oil concentrates or blended oil/surfactant adjuvants (See compatibility section).

DO NOT tank mix MCPA LVE with 4Farmers Carfentrazone 240.

DO NOT tank mix 4Farmers Carfentrazone 240 treatments with selective grass herbicides. DO NOT apply the tank mix of 4Farmers Carfentrazone 240 + MCPA amine before the three leaf crop stage of cereals.

DO NOT apply to cereals under sown with legumes.

DO NOT apply 4Farmers Carfentrazone to winter cereals by aircraft.

DIRECTIONS FOR USE

CROP	TARGET WEED	STATE	RATE/ha 4Farmers Carfentrazone 240 + MCPA	WEED STAGE	CRITICAL COMMENTS	
Winter cereals (wheat, barley, oats, triticale)	Ball mustard <i>Neslia paniculata</i>	All States	85 mL + 330 mL 100 mL + 330 mL	2 leaf to 6 leaf 2 leaf to 8 leaf	General Apply as a post-emergence treatment for the control of small actively growing weeds. Always tank mix with MCPA amine. The MCPA amine rate recommended on this label is the minimum rate of a 750g/L formulation required for control. The corresponding rate for a 500g/L formulation is 500mL/ha. Refer to the specific MCPA amine label for higher use rates. Under wet/ good growing conditions some weed regrowth may occur eg. Bifora. A follow up application of a suitable herbicide ie. 2,4-D amine may be required as part of a good weed management strategy. Refer to General Instructions and Compatibility directions for further application details. + Bifora Addition of metribuzin (75 g ai/ha in wheat, 75-210g ai/ha in barley) or diuron (180-252g ai/ha in labelled cereals) to the standard tank mix of 4Farmers Carfentrazone 240 plus MCPA amine may improve control of Bifora, particularly where higher populations exists. * Cleavers Addition of dicamba, 70-140g ai/ha to the standard tank mix of 4Farmers Carfentrazone 240 plus MCPA amine may improve control of cleavers, stunt any survivors and reduce seedset. If crop growth stage is suitable, use of the highest label rate of 4Farmers Carfentrazone 240 with a higher rate of MCPA amine and of dicamba may optimise cleaver control and seedset reduction. # Indian Hedge Mustard & Wild Radish If phenoxy resistant populations of Indian hedge mustard or Wild radish are suspected, addition of metribuzin (75g ai/ha in wheat, 75-210g ai/ha in barley) or diuron (180-252g ai/ha in labelled cereals) to the standard tank mix of 4Farmers Carfentrazone 240 plus MCPA amine may improve control.	
	Bedstraw/Cleavers* <i>Galium tricornutum</i> <i>G. aparine</i>		85 mL + 330 mL 100 mL + 330 mL	1 to 5 whorls 1 to 10 whorls		
	Bifora+ <i>Bifora testiculata</i>		100 mL + 330 mL	2 leaf to 6 leaf		
	Canola <i>Brassica napus</i> <i>B. campestris</i>		85 mL + 330 mL 100 mL + 330 mL	2 leaf to 6 leaf 2 leaf to 8 leaf		
	Roundup Ready Canola volunteers		85 mL + 330 mL	2 leaf to 4 leaf		
	Capeweed <i>Arctotheca calendula</i>		85 mL + 330 mL	2 leaf to 4 leaf		
	Climbing buckwheat <i>Fallopia convolvulus</i>		85 mL + 330 mL	2 leaf to 6 leaf		
	Crassula <i>Crassula sieberana</i>		85 mL + 330 mL	2 leaf to 8 leaf		
	Fumitory (Dense flower) <i>Fumaria densiflora</i>		85 mL + 330 mL	2 leaf to 8 leaf		
	Indian hedge mustard# <i>Sisymbrium orientale</i>		85 mL + 330 mL	2 leaf to 8 leaf		
	Ivy-leaf speedwell <i>Veronica hederifolia</i>		85 mL + 330 mL 100 mL + 330 mL	2 leaf to 4 leaf 2 leaf to 6 leaf		
	Long storksbill <i>Erodium botrys</i>		All States	85 mL + 330 mL 100 mL + 330 mL		2 leaf to 4 leaf 2 leaf to 6 leaf
	Marshmallow <i>Malva parviflora</i>			65 mL + 330 mL 85 mL + 330 mL 100 mL + 330 mL		2 leaf to 4 leaf 2 leaf to 6 leaf 2 leaf to 8 leaf
	Musk weed <i>Myagrum perfoliatum</i>			85 mL + 330 mL 100 mL + 330 mL		2 leaf to 4 leaf 2 leaf to 6 leaf
	Paterson's curse <i>Echium plantagineum</i>	65 mL + 330 mL 85 mL + 330 mL 100 mL + 330 mL		2 leaf to 4 leaf 2 leaf to 6 leaf 2 leaf to 8 leaf		
	Prickly lettuce <i>Lactuca serriola</i>	85 mL + 330 mL		2 leaf to 8 leaf		
	Rough poppy <i>Papaver hybridum</i>	85 mL + 330 mL		2 leaf to 8 leaf		
	Sheepweed/Corn gromwell/ White iron weed <i>Buglossoides arvensis</i>	85 mL + 330 mL 100 mL + 330 mL		2 leaf to 6 leaf 2 leaf to 8 leaf		
	Shepherd's purse <i>Capsella bursa-pastoris</i>	85 mL + 330 mL		2 leaf to 8 leaf		
	Sowthistle <i>Sonchus oleraceus</i>	85 mL + 330 mL		2 leaf to 6 leaf		
	Spiny emex <i>Emex australis</i>	85 mL + 330 mL		2 leaf to 4 leaf		
	Stinging (dwarf) nettle <i>Urtica urens</i>	85 mL + 330 mL		2 leaf to 6 leaf, prior to branching		
	Sub. clover <i>Trifolium subterraneum</i>	65 mL + 330 mL 85 mL + 330 mL 100 mL + 330 mL		2 leaf to 4 leaf 2 leaf to 6 leaf 2 leaf to 10 leaf		
	Toad rush <i>Juncus bufonius</i>	85 mL + 330 mL 100 mL + 330 mL		2 leaf to 4 leaf 2 leaf to 6 leaf		
	Turnip weed <i>Rapistrum rugosum</i>	85 mL + 330 mL		2 leaf to 8 leaf		
	Volunteer pulses – Faba beans <i>Vicia faba</i>	85 mL + 330 mL + Transit® 100mL OR + Kamba® 500 at 200mL		2 leaf to 5 nodes		
	– Field peas <i>Pisum sativum</i>			2 leaf to 5 nodes		
	– Lentils <i>Lens culinaris</i>			2 leaf to 6 leaf		
	– Lupins <i>Lupinus angustifolius</i>	65 mL + 330 mL 85 mL + 330 mL		2 leaf to 4 leaf 2 leaf to 8 leaf		
	– Vetch <i>Vicia spp</i>	85 mL + 330 mL + Transit® 100mL	2 leaf to 4 branch			

CROP	TARGET WEED	STATE	RATE/ha 4Farmers Carfentrazone 240 + MCPA	WEED STAGE	CRITICAL COMMENTS
Winter cereals (wheat, barley, oats, triticale)	Wild radish# <i>Raphanus raphanistrum</i>	WA only	65mL + 330mL 85mL + 330mL 100mL + 330mL	Majority at 2 leaf Majority at 4 leaf Majority at 6 leaf	Continued from previous page
		SA, Vic, NSW, Qld only	100mL + 330mL	2 leaf to 4 leaf	
Continued	Wild turnip <i>Brassica tournefortii</i>	All States	85mL + 330mL	2 leaf to 6 leaf	
			Wireweed <i>Polygonum aviculare</i>	85mL + 330mL	2 leaf to 4 leaf

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

WITHHOLDING PERIODS

Grazing: DO NOT ALLOW STOCK TO GRAZE TREATED AREAS FOR 14 DAYS AFTER APPLICATION.

Crop Harvest: NOT REQUIRED WHEN USED AS DIRECTED.

GENERAL INSTRUCTIONS

4Farmers Carfentrazone 240 Herbicide is an early post-emergence herbicide for the control of certain broadleaf weeds in winter cereals. 4Farmers Carfentrazone 240 is a fast acting contact herbicide and controls weeds through a process of membrane disruption. The foliar uptake of 4Farmers Carfentrazone 240 is rapid and plant desiccation can occur within 1 to 4 days of application. Application of 4Farmers Carfentrazone 240 should target small actively growing weeds. Subsequent germinations will not be controlled. 4Farmers Carfentrazone 240 should always be tank mixed with MCPA amine in winter cereals.

Symptoms

4Farmers Carfentrazone 240 is rapidly absorbed through the foliage of plants. Within a few hours following application, the foliage of susceptible weeds show signs of desiccation, and in subsequent days necrosis and death of the plant. Due to environmental conditions and certain spray tank additives, some herbicidal symptoms may appear on the crop in the form of leaf spotting. However, the crop recovers quickly, usually within two to three weeks of treatment.

Extremes in environmental conditions eg. temperature and moisture, soil conditions and/or cultural practices may affect the activity of 4Farmers Carfentrazone 240. Under warm moist conditions, herbicide symptoms may be accelerated. While under very dry conditions, the expression of herbicidal symptoms is delayed, and weeds hardened off by drought are less susceptible to 4Farmers Carfentrazone 240.

Compatibility

Winter cereals: 4Farmers Carfentrazone 240 should always be tank mixed with formulations of MCPA amine (500 or 750g/L) to broaden the weed control spectrum compared to either product applied alone. Do not tank mix 4Farmers Carfentrazone 240 with MCPA LVE formulations or ester formulations of other herbicides or with wetters and oil adjuvants, as excessive crop injury may occur.

4Farmers Carfentrazone 240 plus MCPA amine is compatible with clopyralid, dicamba, Cadence, diuron, metribuzin, EDTA chelate formulations of trace elements eg. Supa Copper, Supa Mang and Supa Zinc from Agrichem Manufacturing.

Annual Grass (wild oat, ryegrass etc.) Control: 4Farmers Carfentrazone 240 should not be mixed with selective grass herbicides as grass weed control is significantly reduced and excessive crop injury may occur. Increased crop injury is caused by the crop oil concentrates and oil/surfactant blends used with these grass herbicides. Instead, allow a 10 to 14 day interval between separate broadleaf and grass herbicide applications.

Use of Surfactant/ Wetting Agents/Oil Adjuvants: Do not add wetters, spray oils or oil/surfactant adjuvants to the tank mix of 4Farmers Carfentrazone 240 plus MCPA. The addition of wetters, oils and oil/surfactant blends will greatly increase crop injury without any significant improvement in weed control

Prior to applying 4Farmers Carfentrazone 240 clean the spray tank to remove any wetters or adjuvants remaining from previous spray operations otherwise crop injury may result.

Timing

Application should be made to small, actively growing weeds generally less than 6 to 8 leaf in stage – refer to growth stages for specific weeds. As 4Farmers Carfentrazone 240 is a contact herbicide, best control is achieved when weeds are exposed and are not shielded by other weeds and/or the crop. Ideally crops should be at the 3 leaf to early/mid tillering stage (Zadok’s code 13 to 25), prior to crop canopy closure.

Mixing

Add half the required volume of water to spray tank and start agitation and then add the measured amount of 4Farmers Carfentrazone 240. In cereals add the required volume of MCPA amine next then add buffering agent if required then the balance of water to tank. Maintain good agitation at all times until spraying is completed. The spray solution can be buffered to within the range of pH 5 to pH 8. Do not use with tank additives that alter the pH of the spray solution below pH 5 or above pH 8 or that contain surfactants.

Application

Apply 4Farmers Carfentrazone 240 (plus MCPA amine in cereals) as a broadcast application. Use conventional boom sprayers with either mechanical or by-pass agitation. Spray equipment should be properly calibrated to ensure correct application. Use a spray volume of 50 to 150 litres per hectare. Experience has shown that using a minimum spray volume of 100L/ha can improve weed control. This is particularly important on bifora and other hard to control weeds. Use a minimum of 100L/ha if weed infestation is heavy or the crop cover is dense, and this volume is highly recommended when using the preferred Air Induction (AI) nozzles.

4Farmers Carfentrazone 240 plus MCPA amine – this tank mix must be applied with nozzles that produce a Coarse spray quality (to ASAE S572 standard) due to the MCPA component. Air induction nozzles are the most suitable nozzle type to produce a Coarse spray quality. The preferred nozzles are Agrotop AirMix or TeeJet AIXR.

Do not use air induction (AI) or non AI nozzles that produce a spray quality of Very Coarse and above to apply 4Farmers Carfentrazone 240 plus MCPA Amine. Do not use TeeJet TT nozzles as experience has shown inferior control of bifora, in particular, can result. Single orifice or twin orifice flat fan nozzles can be used provided they meet the specification above. Use if 110-03 or bigger single office nozzles or equivalent twin orifice nozzles with 4Farmers Carfentrazone 240 may reduce control of bifora but not other weeds.

Do not use floodjet, boomless jets or misters or controlled droplet application equipment.

Do not apply 4Farmers Carfentrazone 240 by aircraft. Always ensure that agitation is continued until spraying is completed even if the sprayer is stopped for brief periods of time.

MCPA amine: It is important to follow the MCPA label directions for use in relation to weed and crop size and application timing. The MCPA amine use rate recommended for tank mix with 4Farmers Carfentrazone 240 in cereals on this label is a minimum rate required for control. Higher MCPA amine rates may be used in accordance with the specific MCPA amine label to improve results in difficult situations. The best application conditions are when soil is moist, weather fine and rain unlikely within 6 hours.

Extremes in environmental conditions eg. temperature and moisture, soil conditions and/or cultural practices may affect the activity of 4Farmer Carfentrazone 240 EW Herbicide. Under warm moist conditions, herbicide symptoms may be accelerated. While under very dry conditions, the expression of herbicidal symptoms is delayed, and weeds hardened off by drought are less susceptible to 4Farmers Carfentrazone 240.

Sprayer Clean Out

Thoroughly clean all spray equipment using the following procedure when you have finished spraying highly active materials such as carfentrazone-ethyl.

In addition to the following procedure, ensure proper equipment clean-out for any other products mixed with 4Farmers Carfentrazone 240 as specified on the other product labels.

IMPORTANT: More complete cleaning can be achieved if the spray equipment is cleaned immediately following each use.

Mix only as much herbicide spray solution as needed at a time.

DO NOT store the sprayer for any extended period of time, especially over night, with 4Farmers Carfentrazone 240 spray solution remaining in the tank, spray lines, spray boom plumbing, spray nozzles or strainers.

Preparation of the Cleaning Solution: Prepare a spray equipment cleaning solution by mixing an alkaline detergent eg. “OMO” or “SPREE” at a rate of 100g for every 100L of clean water used.

Upon completion of applying 4Farmers Carfentrazone 240 and before spraying sensitive crops including canola, pulses such as faba beans, lentils, other legumes and cotton:

- Fill the spray tank with sufficient cleaning solution to allow the operation of the spray system for a minimum of 15 minutes to thoroughly flush hoses, spray boom and spray nozzles then fill the spray tank to capacity to ensure contact of the solution with all internal surfaces. Let the cleaning solution soak in tank, pump and spray lines overnight.
- Before further use of the sprayer, operate the spray system for 15 minutes, then completely drain the sprayer system. Rinse the tank with clean water and flush through the hoses, spray boom, and spray nozzles.
- If possible spray a pesticide requiring an oil adjuvant eg. Achieve & Supercharge onto cereals as a further means of removing possible residues of 4Farmers Carfentrazone 240 before spraying sensitive crops.
- Immediately prior to commencement of spraying a sensitive crop, purge the boom lines by operating the spray system onto a fence line or waste area for sufficient time to remove any solution that has been residing in the spray lines. This is also recommended for subsequent tank loads or if the sprayer has been left standing for a period of time containing spray solution.
- If storing equipment for more than 48 hours, preferred practice is to clean spray equipment as outlined above allowing to soak over night, drain and flush with fresh water and leave fresh water in the spray tank, hoses, and spray booms until next use. This water must be drained from the spray boom and lines and flushed out with clean water before beginning any application to a sensitive crop.

Properly dispose of all cleaning solution and rinsate safely in accordance with Federal, State, and local regulations and guidelines.

Do not apply sprayer cleaning solutions or rinsate to sensitive crops.

Should small amounts of 4Farmers Carfentrazone 240 remain in inadequately cleaned mixing, loading and/or spray equipment, they may be released during subsequent applications potentially causing effects to sensitive crops and other vegetation.

The above mentioned is only effective if the cleaning solution comes into contact with every surface or contact point that may contain even minute carfentrazone-ethyl residues.

Crop Rotation Recommendations

4Farmers Carfentrazone 240 Herbicide does not provide residual activity, therefore no crop rotational restrictions apply.

RESISTANT WEEDS WARNING

GROUP G HERBICIDE

4Farmers Carfentrazone 240 Herbicide is a member of the Aryl triazolinone group of herbicides. Its mode of action is through a process of membrane disruption, which is initiated by the inhibition of the enzyme protoporphyrinogen oxidase. This inhibition interferes with the chlorophyll biosynthetic pathway. For weed resistance management 4Farmers Carfentrazone 240 is a Group G herbicide.

Some naturally occurring weed biotypes resistant to 4Farmers Carfentrazone 240 and other herbicides that inhibit the enzyme protoporphyrinogen oxidase may exist through normal genetic variability in any weed population and increase if these herbicides are used repeatedly. These resistant weeds will not be controlled by 4Farmers Carfentrazone 240 or other herbicides that inhibit the enzyme protoporphyrinogen oxidase.

Since the occurrence of resistant weeds is difficult to detect prior to use, 4Farmers Australia Pty Ltd accepts no liability for any losses that may result from the failure of 4Farmers Carfentrazone 240 to control resistant weeds.

RE-ENTRY PERIOD

Do not allow entry into treated areas until the spray has dried, unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day’s use.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

Do not apply under weather conditions, or from spray equipment, which may cause spray drift onto nearby susceptible plants, adjacent crops or pastures, or onto wetlands, waterbodies or watercourses.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Highly toxic to algae and aquatic plants. DO NOT contaminate streams, rivers or waterways with 4Farmers Carfentrazone 240 or used container.

STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool, well ventilated area out of direct sunlight. Triple rinse containers before disposal. Add rinsings to spray tanks. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycle or designated collection point. If not recycling, break, crush or puncture and deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500mm 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.

For refillable containers: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

Spillage: In case of spillage, confine spilled product with material such as sand or clay. Dispose of waste as indicated below or according to the Australian Standard 2507 – Storage and Handling of Pesticides. DO NOT allow spilled product to enter sewers, drains, creeks or any other waterways. Keep out animals and unprotected persons. Vacuum, shovel or pump waste into an approved drum. To decontaminate spill area, tools and equipment, wash with a suitable solution (ie. organic solvent, detergent, bleach or caustic) and add the solution to the drums of wastes already collected. Label for contents. Dispose of drummed wastes, including decontamination solution, in accordance with the requirements of Local or State Waste Management Authorities.

SAFETY DIRECTIONS

Will irritate the eyes and skin. Avoid contact with eyes and skin. When opening the container and preparing spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length chemical resistant gloves and goggles or safety glasses. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. Wash hands after use. After each day’s use, wash gloves, face shield or goggles and contaminated clothing.

FIRST AID INSTRUCTIONS

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26; New Zealand 0800 764 766.

SAFETY DATA SHEET

For further information please refer to the Safety Data Sheet. For a copy visit our website at www.4farmers.com.au

CONDITIONS OF SALE

“4Farmers Australia Pty Ltd (‘4Farmers’) shall not be liable for any loss, injury, damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence or otherwise in connection with the sale supply, use or application of this product. The supply of this product is on the express condition that the purchaser does not rely on 4Farmers’ skill or judgments in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of 4Farmers has any authority to add to or alter these conditions.”