

Main Panel

POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

AFFINITY[®] PLUS HERBICIDE

ACTIVE CONSTITUENTS: 39 g/kg CARFENTRAZONE-ETHYL
563 g/kg MCPA PRESENT AS SODIUM SALT

GROUP **G** **I** HERBICIDE

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

IMPORTANT: READ THE ATTACHED LEAFLET BEFORE USE

NET CONTENTS: 2, 5 & 10 kg

FMC (Chemicals) Pty Ltd
77 Tingira Street
Pinkenba Qld 4008

N.R.A.	
APPROVED LABEL (TEXT)	
Label No:	53371/0801
Date:	21/06/2001
Signature:	<i>Red Dan</i>

Ancillary Panel

STORAGE AND DISPOSAL

Do not store near (or allow to contact) fertilisers, fungicides or pesticides. Store in the closed, original container in a dry, cool, well ventilated area out of direct sunlight. Store in a place away from children, animals, food, feed stuffs, seed and fertilisers.

Spillage - In case of spillage, confine spilled product with material such as sand or clay. Dispose of waste as indicated below or according to 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.

HDPE Containers

Triple or preferably 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 landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

Plastic bag in a Box Container

Single rinse before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. Puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically 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

Harmful if swallowed. Attacks eyes. Will irritate skin. Avoid contact with eyes and skin. When opening container, preparing spray or using prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles and a dust mask. If product on skin, immediately wash area with soap and water. If product or spray in eyes, wash it out with 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, goggles and contaminated clothing.

FIRST AID

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

MATERIAL SAFETY DATA SHEET (MSDS)

Additional information is listed in the MSDS FMC/AFFPLU/1, which is available from the supplier.

WARRANTY

FMC makes no warranty expressed or implied, concerning the use of this product other than that indicated on the label. Except as so warranted the product is sold as is. Buyer and user assume all risk of use and/or handling and/or storage of this material when such use and/or handling and/or storage is contrary to label instructions.

TRADEMARKS

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* Other trademarks

BATCH No:

DOM:

NRA Approval No: 53371/0801

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FMC (Chemicals) Pty Ltd
77 Tingira Street
Pinkenba Qld 4008

DIRECTIONS FOR USE

RESTRAINTS:

DO NOT tank mix Affinity Plus with crop oil concentrates or blended oil/surfactant adjuvants.

DO NOT tank mix MCPA LVE with Affinity Plus.

DO NOT tank mix Affinity Plus treatments with selective grass herbicides

DO NOT apply Affinity Plus before the three leaf crop stage.

DO NOT apply to cereals under sown with legumes.

DO NOT apply Affinity Plus to winter cereals by aircraft.

CROP	TARGET WEED	STATE	Affinity Plus rate/ha	WEED STAGE	CRITICAL COMMENTS
Winter cereals (wheat, barley, oats, triticale) Apply at the 3 leaf to early/mid tillering stage (Zadock's 13 to 25)	Bedstraw/Cleavers <i>Galium tricomutum</i>	All States	500g	6 to 10 whorls	General Apply as a post-emergence treatment for the control of small actively growing weeds. The addition of a non-ionic surfactant at a maximum rate of 50mL/100L of final spray volume to Affinity Plus may be used to improve weed control under drier growing conditions at time of application. Refer to General Instructions and Compatibility directions for further application details.
	Bifora <i>Bifora testiculata</i>		500g	Up to 6 leaf	
	Capeweed <i>Arctotheca calendula</i>		500g	Up to 8 leaf	
	Climbing Buckwheat <i>Fallopia convolvulus</i>		500g	Up to 6 leaf	
	Crassula <i>Crassula sieberana</i>		500g	Up to 8 leaf	
	Fumitory (Dense flower) <i>Fumaria densiflora</i>		500g	Up to 8 leaf	
	Indian hedge mustard <i>Sisymbrium orientale</i>		500g	Up to 8 leaf	
	Lupins <i>Lupinus angustifolius</i>		400g	Up to 4 leaf	
			500g	Up to 8 leaf	
	Prickly Lettuce <i>Lactuca serriola</i>		500g	Up to 8 leaf	
	Rough Poppy <i>Papaver hybridum</i>		500g	Up to 8 leaf	
	Shepherd's Purse <i>Capsella bursa-pastoris</i>		500g	Up to 8 leaf	
	Sowthistle <i>Sonchus oleraceus</i>		500g	Up to 6 leaf	
	Spiny Emex <i>Emex australis</i>		500g	Up to 4 leaf	
	Turnip Weed <i>Rapistrum rugosum</i>		500g	Up to 8 leaf	
	Wild Radish <i>Raphanus raphanistrum</i>		600g	Up to 4 leaf	
	Wild Turnip <i>Brassica tournefortii</i>		500g	Up to 6 leaf	
Wireweed <i>Polygonum aviculare</i>	500g	Up to 8 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 GRAZE TREATED AREAS FOR 14 DAYS AFTER APPLICATION.
Crop Harvest: NOT REQUIRED WHEN USED AS DIRECTED

GENERAL INSTRUCTIONS

Affinity Plus Herbicide is an early post emergence herbicide for the control of certain broadleaf and sedge weeds in winter cereals and rice. Affinity Plus is a co-formulation of carfentrazone-ethyl and MCPA present as sodium salt. The respective active ingredients combine to provide a fast acting contact herbicide which provides dual modes of action for the control of weeds through a process of membrane disruption as well as disruption of plant cell growth. The foliar uptake of Affinity Plus is rapid and plant desiccation can occur within 1 to 4 days of application. Application of Affinity Plus should target small actively growing weeds. Subsequent germinations will not be controlled.

SYMPTOMS

Foliar application

Affinity Plus 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 Affinity Plus. 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 Affinity Plus. Under dry conditions the addition of a non-ionic surfactant may be used to improve weed control.

COMPATIBILITY

Affinity Plus Herbicide can be tank mixed with Ally, Diurex, Igran, Eclipse, Logran and formulations of MCPA Amine (500 g/L) eg. Thistlekillern.

Do not tank mix with MCPA **LVE** formulations or ester formulations of other herbicides or with oil/surfactant blends, as excessive crop injury may occur.

When tank mixing read both labels and adhere to the crop recommendations and directions that are most restrictive.. The compatibility's given are based on experience and are considered correct. However, as changes to climatic conditions can alter the sensitivity of plants to mixtures in sprays, FMC accepts no responsibility for the behaviour of such mixtures.

Annual Grass Control (wild oat, rye grass etc.)

Affinity Plus 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 treatments.

Use of Surfactant/ Wetting Agents

The addition of a non-ionic surfactant (1000 gai/L) such as BS1000*, at a maximum rate of 50 mL/100 L of final spray volume (0.05% volume/volume) may be used to improve weed control under drier growing conditions at time of application. At this use rate some leaf spotting may appear on the crop, however the crop recovers quickly, usually within two to three weeks of treatment.

The addition of oils and oil/surfactant blends will reduce crop selectivity and increase crop injury. Increasing the rate of these adjuvants results in increased (excessive) herbicide symptoms. Do not tank mix Affinity Plus with spray oils or oil/surfactant blends, as excessive crop injury may occur.

RESISTANT WEEDS WARNING

GROUP	G	I	HERBICIDE
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Affinity Plus Herbicide is a member of both the of the Aryl triazolinone and phenoxy's group of herbicides. Affinity Plus has a process of membrane disruption, which is initiated by the inhibition of the enzyme protoporphyrinogen oxidase and disruptor of plant cell growth modes of action. For weed resistance management Affinity Plus is a Group G and a Group I herbicide.

Some naturally occurring weed biotypes resistant to Affinity Plus and other group G or I herbicides may exist through normal genetic variability in any weed population. The resistant individuals can eventually dominate the population if the herbicides are used repeatedly. These resistant weeds will not be controlled by Affinity Plus or other inhibitors of the enzyme protoporphyrinogen oxidase, or disruptor of plant cell growth herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, FMC International A.G. accepts no liability for any losses that may result from the failure of Affinity Plus to control resistant weeds.

TIMING

Application should be made to small, actively growing weeds less than 6 to 8 leaf in size. As Affinity Plus 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 in spray tank and start agitation. Add the measured amount of Affinity Plus next. Add balance of water to tank and add non-ionic surfactant at recommended rate if necessary. Maintain good agitation at all times until spraying is completed. Reseal part used containers immediately.

APPLICATION

Apply Affinity Plus as a broadcast application. Use conventional boom sprayers with either mechanical or by-pass agitation. Flat fan nozzles should be used. Spray equipment should be properly calibrated to ensure correct application. Use a spray volume of 50 to 150 litres per hectare. Use the lowest pressure and boom height that provides uniform coverage. Use the higher volume if weed infestation is heavy or the crop cover is dense.

The best condition for spraying are when soil is moist, weather fine and rain unlikely within 6 hours of application.

Under dry growing conditions, a low rate of a non-ionic surfactant (1000 gai/L) such as BS1000 may be added at a maximum rate of 50mL/100 L of final spray volume (0.05% v/v) to improve weed control.

Extremes in environmental conditions e.g. temperature and moisture, soil conditions and cultural practices may affect the activity of Affinity Plus. 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 Affinity Plus. Under dry conditions the addition of a non-ionic surfactant may be added to improve weed control.

SPRAYER CLEAN OUT

After spraying Affinity Plus and before using sprayer equipment for any other applications i.e. before spraying sensitive crops such as faba beans, canola, lentils etc. the sprayer must be thoroughly cleaned using the following procedure. In addition users must take appropriate steps to ensure proper equipment clean out for any other products mixed with Affinity Plus as explained on the other product labels.

1. Drain sprayer tank, hoses, and spray boom and thoroughly rinse with clean water the inside of the sprayer tank free of visible sediment and residues. Remove all filters and nozzle strainers and clean to remove any sediment and residues. Flush through sprayer hoses, boom and nozzles. Pay particular attention to dead spots in the system eg boom ends and in the tank.
2. Fill the tank ½ full with clean water, and add an alkaline detergent eg. "OMO" or "SPREE" at 100g/100L, to the spray tank to increase the pH of the solution to 10 or above. Fill the tank to capacity and operate the sprayer for 15 minutes to flush hoses, boom and nozzles.
3. Drain the sprayer system. Rinse the tank with clean water and flush through the hoses, boom and nozzles. Remove and check all filters and nozzle strainers, clean if necessary.

A good boom hygiene practice is to follow the use of Affinity Plus with a cereal grass herbicide and an oil adjuvant in an alternative cereal crop, before spraying a sensitive crop.

CROP ROTATION RECOMMENDATIONS

Affinity Plus Herbicide does not provide residual activity when used as directed, therefore no crop rotational restrictions apply.

Re-entry

Do not allow entry into treated areas for 24 hours after treatment. When prior entry is necessary, wear cotton overalls buttoned to the neck and wrist and a washable hat, goggles 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, CRUSTACEAN, AND ENVIRONMENT

Highly toxic to algae and aquatic plants. DO NOT contaminate streams, rivers or waterways with Affinity Plus or used container.

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