# **CAUTION**

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

# ™ Clopyralid

300 HERBICIDE

ACTIVE CONSTITUENT: 300 g/L CLOPYRALID present as the TRIISOPROPANOLAMINE SALT



HERBICIDE



For the control of a wide range of broadleaf weeds in wheat, barley, triticale, oats, pastures, canola, fallow land, forests and industrial situations as specified in the DIRECTIONS FOR USE table.

IMPORTANT: READ THIS LEAFLET BEFORE USE



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# DIRECTIONS FOR USE

IT IS ESSENTIAL to select a rate appropriate to weed size. Best results will be obtained when weeds are actively growing at treatment.

# Restraints:

**DO NOT** apply to weeds, which may be stressed (inactive growth) due to prolonged periods of extreme heat or cold, moisture stress (water logging or drought) or previous herbicide treatment as reduced levels of control may result.

**DO NOT** sow susceptible crops (see PROTECTION OF CROPS) for nine months following any application up to 300mL/ha or for twelve months following an application in excess of 300mL/ha and up to 500mL/ha. Field peas should not be sown the season following an application of 500mL/ha. Where rates in excess of 500mL/ha have been used, susceptible crops including field peas, should not be sown for at least two years.

DO NOT spray if rain is likely within 3 hours.

Crop	Crop Stage	Weed	Weed Stage	Rate mL/ha	State		Critical Comments
Barley Oats Triticale Wheat	Pre-sowing	·   m	Up to 8 leaf and maximum 10 cm diameter	150 plus knockdown herbicide	WA only		Pre-sowing: This rate should only be used in tank mixture with formulations of paraquat/diquat or glyphosate.  Post sowing pre-emergent to 3 leaf: This rate should only be used in tank mixture with diuron for control of transplants. Refer to diuron label for specific rates.
	Post-sowing pre- emergence through to 3 leaf			150 plus diuron at labelled rates			
	Early post- emergence (2 leaf to jointing)		Cotyledons to 6 leaf and maximum 5cm diameter	150		_	Early post-emergent: Weeds should be growing actively and not larger than 5cm diameter.
	4 to 5 leaf onwards	Capeweed Soldier thistle	Up to 10cm diameter (4 to 8 leaf)	300	NSW, ACT, Vic, SA, Tas and WA only		Weeds should be young and actively growing. Weeds will become stunted and not be competitive soon after application although final results may not show for some weeks.  Faba beans and lupins will only be suppressed.  Use 75mL/ha rate only in combination with MCPA LVE.
		Volunteer chickpeas, lentils and safflower	Up to 6 leaf				
		Volunteer faba beans and lupins	Up to 4 leaf				
		Volunteer field peas	Maximum 10cm high or 6 nodes	150			
				75 plus 700mL/ha MCPA LVE			

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Crop	Crop Stage	Weed	Weed Stage	Rate mL/ha	State	Critical Comments
Barley Oats Triticale Wheat	4 to 5 leaf onwards	Volunteer medics and seedling lucerne	Up to 8 leaf	150	NSW, ACT, Vic, SA,	Weeds should be young and actively growing. Weeds will become stunted and not be competitive soon after application although final results may not show for some weeks.
		Volunteer sub-clover	Up to 6 leaf		Tas and WA only	
		Volunteer vetch	Runners up to 10cm maximum 16 leaf	100		Faba beans and lupins will only be suppressed.
				75 plus 700mL/ha MCPA LVE		Use 75mL/ha rate only in combination with MCPA LVE.
		Prickly lettuce	4 to 6 leaf and maximum 8cm diameter	150 plus 700mL/ha MCPA LVE		
		Thistles including: Nodding Saffron Scotch Slender Spear Stemless Variegated	Rosettes up to 10cm maximum diameter	50 plus 1.0L/ha MCPA amine (500g/L) or 50 plus 700mL/ha MCPA LVE	NSW, ACT, Vic, SA, Tas, Qld and WA only	
	5 leaf to late tillering	Skeleton weed	5 to 15cm rosettes	500 plus 1.0L/ha MCPA amine (500g/L)	NSW, ACT, Vic and SA only	Weeds should be a minimum 5cm in diameter, and growing actively. This rate will give control until harvest and substantially reduce weed numbers the following season.
Canola	2 to 8 leaf	Capeweed Saffron thistle Skeleton weed Soldier thistle	Up to 10cm diameter (4 to 8 leaf)	300	NSW, ACT, Vic, SA, Tas, WA, Qld only	Weeds should be young and actively growing. Weeds will become stunted and will not be competitive soon after application although final results may not show for some weeks. Skeleton weed will only be controlled until harvest.  Faba beans and lupins will only be suppressed.
		Volunteer chickpeas, lentils and safflower	Up to 6 leaf	250		For the control of annual grasses, FMC Clopyralid 300 may be tank mixed with Verdict Herbicide.
		Volunteer faba beans and lupins	Up to 4 leaf	250		
		Volunteer field peas	Maximum 10cm high or 6 nodes	150		
		Volunteer medics and seedling lucerne	Up to 8 leaf	150		
		Volunteer sub-clover	Up to 6 leaf	150		
		Volunteer vetch	Runners up to 10cm maximum 16 leaf	100		

Crop	Crop Stage	Weed	Weed Stage	Rate mL/ha	State	Critical Comments
Pastures and fallow land	Post- emergence	Hardhead thistle (Creeping knapweed, Russian knapweed)	Actively growing plants	Hand gun: 500mL/100L of water Boom spray: 2 or 4L/ha	Vic only  Qld only	NOTE: DO NOT USE ON LUCERNE. CLOVERS AND MEDICS WILL BE ELIMINATED FOR AT LEAST ONE YEAR.  Victoria only: Use the lower rate only on light soils (sand and sandy loam) where a slightly lower degree of control is acceptable. Use the higher rate on all soil types where complete control is required. Addition of a wetting agent at label rates is recommended for treatment of hardhead thistle. Spray between September and April on actively growing plants for effective control. Thorough coverage is essential. Apply in 200 to 250L of water/ha.
		Thistles including: Nodding Variegated Scotch Spear Siender Saffron	Rosette stage prior to stem elongation. Treat rosette stage prior to stem elongation.	50 or 70mL/ha plus 1 to 1.5L MCPA amine (500g/L)/ha Drench gun: 50mL/1 L of water Hand gun: 250mL/100L of water	NSW, ACT, Vic, Tas, SA and Qld only	BOOM SPRAYING: Use the higher rates of FMC Clopyralid 300 plus MCPA on multi-crowned plants or rosettes larger than 30cm in diameter. Spraying may be done at any time during active growth, usually in early winter or spring. Avoid spraying during the dormant winter period or at any time when thistles are not actively growing. Do not spray flowering thistles.  PRE-SPRAY MANAGEMENT: The pasture should be slightly grazed prior to spraying to reduce clover and grass cover and expose the smaller thistles to the spray. The grazed pasture should be left for seven days to allow thistles to freshen prior to treatment.  POST-TREATMENT MANAGEMENT: Response of thistles to treatment with the FMC Clopyralid 300 plus MCPA mixture will be slow compared to the standard treatments with 2,4-D or MCPA. If possible delay grazing of sprayed thistles for 14 days after treatment.  CLOVER DAMAGE: The FMC Clopyralid 300 plus MCPA mixture can be very damaging to subterranean clover. The lower rate is no more damaging than label rates of 2,4-D or MCPA. The higher rate of the FMC Clopyralid 300 plus MCPA mixture will reduce the clover component of the pasture for about two months. Clover recovery will be quicker during periods of active growth.  HANDGUN (Spot spray): Treat from rosette stage to early flowering. Thorough spraying is necessary.  DRENCHGUN: Apply 10mL to rosette crown. To multicrown plants, apply 10mL to each crown.
	Post- emergence	Nodding thistle	Rosettes up to 20cm diameter	100	NSW, ACT only	Apply the spray from September to October. Apply by boom spray only. <b>DO NOT</b> apply to thistles over 20cm in diameter. When thistles are over 20cm in diameter use FMC Clopyralid 300 plus MCPA (referred to above). <b>Clover Damage:</b> Damage to white clover will be no greater than damage with MCPA alone and less than damage from FMC Clopyralid 300 plus MCPA mixtures. Damage to sub-clover may be greater than with MCPA or 2,4-D alone. <b>DO NOT</b> use for spot treatment.
		Californian thistle	From early buds to flowering (December to February)	Hand gun: 250mL/100L of water Boom spray: 2L/ha	Vic and Tas only	Addition of a wetting agent at label rates is recommended. Re-treatment of re-growth in the year following treatment will usually be necessary to achieve a high level of control. <b>NOTE:</b> Clovers and medics will be eliminated for at least one year.
Pasture, Forests, Rights- of-Way, Industrial Situations	Post- emergence	Groundsel bush	Young seedlings to mature plants	Hand gun: 330 or 500mL/100L of water	Qld, NSW, ACT only	Spray foliage when growth is active. Use the lower rate on young seedlings and the higher rate on plants more than 2m tall or when growth is slow.
Pinus radiata plantations		Silver wattle	Active growth spring to summer	Hand gun: 500mL/ 100L of water Boom and aerial spray: 5L/ha (weeds 30cm to 2m) 7L/ha (weeds 2 to 4m) 8.5L/ha (weeds 4 to 8m)	NSW, ACT, Vic and Tas only	For effective control apply when bushes are growing actively. Large trees will not show complete necrosis. <b>HANDGUN:</b> Means high volume <b>NOT</b> low volume knapsack. Spray to give full coverage of leaves and stems. Add organosilicone surfactant at 200mL/100L for optimum results. See General Instructions for handgun spraying. <b>BOOM AND AERIAL SPRAYING:</b> For boom spraying apply in 150 to 200L of water/ha. For aerial treatment apply in a minimum of 50L/ha of water containing 25 to 50% by volume of anti-evaporant oil such as Ulvapron. Mix FMC Clopyralid 300 and water first and then add Ulvapron. Maintain continuous agitation. Clovers and other legumes will be eliminated for at least one year.
Forests		Cape ivy	Any growth stage	Hand gun: 3.3L/ha	Vic and Tas only	Apply by hand held weed wiper or CDA at dilutions with water at 1:3. Application may be made at any time of the year provided foliage is dry at the time. Avoid spraying non-target plants.

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

WITHHOLDING PERIODS

PASTURES and FALLOW LAND: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION

**CEREALS: DO NOT HARVEST FOR 10 WEEKS AFTER APPLICATION** 

CANOLA: DO NOT HARVEST FOR 12 WEEKS AFTER APPLICATION

CEREALS AND CANOLA: DO NOT GRAZE OR CUT TREATED CEREALS FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION

FORESTS, except *Pinus Radiata* PLANTATIONS: DO NOT graze for 7 days after application *Pinus radiata* PLANTATIONS: DO NOT GRAZE FOR 14 DAYS AFTER APPLICATION

#### GENERAL INSTRUCTIONS

#### MIXING

Half fill the spray tank with water and add the required amount of FMC Clopyralid 300 and complete filling. Agitate continuously to ensure thorough mixing before and during application. Only mix sufficient chemical for each day's work.

#### TANK MIXTURES

Wettable powder or dry flowable formulations should be added to the spray tank first, followed by suspension concentrates (flowables), aqueous concentrates, emulsifiable concentrate formulations (e.g. Haloxyfop or MCPA LVE).

# COMPATIBILITY

FMC Clopyralid 300 is compatible with the following:

**BROADLEAF HERBICIDES**: Metsulfuron-methyl, bromoxynil, chlorsulfuron, diuron, glyphosate, MCPA amine, MCPA LVE, paraquat, paraquat/diquat, terbutryn, 2,4-D amine.

**GRASS HERBICIDES IN CEREAL CROPS:** diclofop-methyl, Grasp +, Puma + (+ Grasp and Puma for wild oat control only).

GRASS HERBICIDES ON BROADLEAF CROPS: Haloxyfop.

# APPLICATION

#### **BOOM SPRAYING CROP AND PASTURES**

Apply FMC Clopyralid 300 in sufficient water to obtain good coverage. It should be applied by an accurately calibrated ground rig or aircraft, delivering 200 to 300 micron droplets and not less than 50L/ha water volume for boom sprayers or not less than 20L/ha for aerial applications. Hardhead thistle — Use a spray volume of 200 to 250L/ha of water. Silver wattle — Use a spray volume of 150 to 200L/ha of water by ground boomspray and a minimum spray volume of 50L/ha by aircraft.

# HIGH VOLUME HAND GUN:

Apply the recommended mix to give full coverage of leaves and stems through a No. 6-8 tip at 700 to 1500 kPa. Spray volume for effective coverage of dense two metre high silver wattle should be 30 to 40 litres of spray per  $100m^2$  ( $10m \times 10m$ ) of infestation. For larger areas an equivalent would be 3000 to 4000 litres per infested hectare.

#### CLEANING SPRAY EQUIPMENT

Rinse water should be discharged onto a designated disposal area or, if this is unavailable, onto unused land away from desirable plants and water courses.

PARTIAL CLEANING (before spraying other labelled or tolerant crops):

After using FMC Clopyralid 300, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose. Quarter fill the tank with clean water and circulate through the pump, line, hoses and nozzles. Drain and repeat procedure twice.

**COMPLETE CLEANING** (before spraying susceptible crops):

After using FMC Clopyralid 300, empty the tank completely and drain the whole system. Thoroughly wash inside the tank using a pressure hose. Quarter fill the tank with clean water and circulate as above, then drain. Quarter fill the tank again and add a liquid alkali detergent (e.g. Surf®, Omo®, Drive®) at 500mL/100L water and circulate throughout the system for at least fifteen minutes. Drain, remove filters and nozzles and clean separately. Rinse inside the tank thoroughly using a pressure hose and flush system with clean water.

#### RESISTANT WEEDS WARNING

GROUP HERBICIDE

FMC Clopyralid 300 Herbicide is a member of the Pyridines group of herbicides. The product has the disrupters of plant cell growth mode of action. For weed resistance management, the product is a Group I herbicide. Some naturally occurring weed biotypes resistant to the product and other Group I herbicides may exist through normal genetic variability in any weed population. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly.

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These resistant weeds will not be controlled by the product or other Group I herbicides. Since occurrence of resistant weeds is difficult to detect prior to use, FMC Australia Pty Ltd accepts no liability for any losses that may result from the failure of the product to control resistant weeds. Strategies to minimise the risk of herbicide resistance are available. Contact your farm chemical supplier, consultant, local Department of Agriculture, or FMC Australia representative.

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

DO NOT apply under weather conditions, or from spraying equipment that may cause spray drift onto nearby susceptible plants/crops, cropping lands or pastures. DO NOT apply FMC Clopyralid 300 to crops or pastures, which are to be used for the production of compost or mulches for use with susceptible crops or plants. The use of straw, hay or other plant material treated with FMC Clopyralid 300 for composting or mulching susceptible crops may damage these crops. Susceptible crops include chickpeas, cotton, faba beans, field peas, fruit trees, lentils, lupins, lucerne, medics, ornamentals, potatoes, safflower, sub-clover, tomatoes, vegetables, vines, wattles and white clover. DO NOT allow spray drift onto susceptible crops.

Plant back periods: Residues in the straw of treated crops can affect subsequent susceptible crops. Susceptible crops listed above should not be sown for: nine months following any application up to 300mL/ha; twelve months following an application in excess of 300mL/ha and up to 500ml/ha

**Note:** Field peas are particularly susceptible and should not be sown the season following an application of 500mL/ha. Where rates in excess of 500mL/ha have been used, susceptible crops, including field peas, should not be sown for at least two years.

#### PROTECTION OF LIVESTOCK

DO NOT graze or cut treated crops for stock food except as specified under WITHHOLDING PERIODS.

# PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

FMC Clopyralid 300 has low toxicity to fish, birds, honey bees, livestock, earthworms and aquatic organisms. DO NOT contaminate streams, rivers or waterways with chemical or used containers.

#### STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. DO NOT store near feedstuffs, fertilisers or seed. 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 500mm 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.

#### SMALL SPILL MANAGEMENT

Wear protective equipment (See SAFETY DIRECTIONS). Apply absorbent material such as earth, sand, clay granules or cat litter to the spill. Sweep up material for disposal when absorption is completed and contain in a refuse vessel for disposal. (See STORAGE AND DISPOSAL section). If necessary, wash the spill area with an alkali detergent and water and absorb as above, the wash liquid for disposal.

#### SAFETY DIRECTIONS

May irritate the eyes and skin. Avoid contact with eyes and skin. DO NOT inhale the spray mist. When preparing the spray, wear elbow-length PVC gloves and face shield. 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, face shield and contaminated clothing.

#### FIRST AID

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

# MATERIAL SAFETY DATA SHEET

Additional information is listed in the Material Safety Data Sheet, which is available from the supplier.

# WARRANTY

FMC Crop Protection Pty Ltd 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.

APVMA Approval No: 67808/56902

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Emergency Dial
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Brigade

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