Company Name: MACSPRED PTY. LTD.

Product Name: MACSPRED Clopyralid 300 Herbicide

APVMA Approval No: 82752/106651

Trade Advice:



Label Name:	MACSPRED Clopyralid 300 Herbicide							
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Signal Headings:	CAUTION							
	KEEP OUT OF REACH OF CHILDREN							
	READ SAFETY DIRECTIONS BEFORE OPENING OR USING							
Constituent Statements:	300 g/L CLOPYRALID present as the TRIISOPROPANOLAMINE SALT							
Mode of Action:	GROUP I HERBICIDE							
Statement of Claims:	For the control of a wide range of broadleaf weeds in wheat, barley, triticale, oats, pastures, canola, fallow land, forests and industrial situations							
Net Contents:	5 L to 1000 L							
Net Contents.	3 L to 1000 L							
Directions for Use:	e: This section contains file attachment. File Name: DIRECTIONS FOR USE Clopyralid 300 Herbicide 20160509.docx File Size: 21342 bytes							
Withholding	PASTURES and FALLOW LAND: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7							
Periods:	DAYS AFTER APPLICATION CEREALS: DO NOT HARVEST FOR 10 WEEKS AFTER APPLICATION							
	CANOLA: 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:

It is essential to select a rate appropriate to weed size. Best results will be obtained when weeds are actively growing at treatment.

MIXING:

Half fill the spray tank with water and add the required amount of Macspred Clopyralid 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:

Macspred Clopyralid is compatible with the following:

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

GRASS HERBICIDES IN CEREAL CROPS: diclofop-methyl.

GRASS HERBICIDES ON BROADLEAF CROPS: Haloxyfop.

APPLICATION

BOOM SPRAYING CROP and PASTURES

Apply Macspred Clopyralid 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 100m² (10m x 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 labeled or tolerant crops):

After using Macspred Clopyralid 300 Herbicide, 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 Macspred Clopyralid 300 Herbicide, 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.

Resistance Warning:

GROUP I HERBICIDE

Macspred Clopyralid 300 Herbicide is a member of the Pyridines group of herbicides. The product Macspred Clopyralid 300 Herbicide has the disrupters of plant cell growth mode of action. For weed resistance management, the product Macspred Clopyralid 300 Herbicide 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. 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, Macspred 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 Macspred Pty Ltd representative.

Protections:

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 Macspred Clopyralid 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 Macspred Clopyralid 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, subclover, 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 Macspred Clopyralid 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-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 deliver 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.

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

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 Instructions:

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

First Aid Warnings:

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	Capeweed	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.
	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	Weeds should be young and actively growing. Weeds will become stunted and not be competitive soon after application although final results may not
		Volunteer chickpeas, lentils and safflower	Up to 6 leaf	250	and WA only	show for some weeks.
		Volunteer faba beans and lupins	Up to 4 leaf			Faba beans and lupins will only be suppressed.
		Volunteer field peas	Maximum 10cm	150	1	Use 75mL/ha rate only in combination with MCPA
			high or 6 nodes	75 plus 700mL/ha MCPA LVE		LVE.
		Volunteer medics and seedling lucerne	Up to 8 leaf	150		
		Volunteer sub-clover	Up to 6 leaf			
		Volunteer vetch	Runners up to 10cm	100		
			maximum 16 leaf	75 plus 700mL/ha MCPA LVE		
Barley Oats Triticale Wheat	4 to 5 leaf onwards	Prickly lettuce	4 to 6 leaf and maximum 8cm diameter	150 plus 700mL/ha MCPA LVE	NSW, ACT, Vic, SA, Tas and WA 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.

CROP	CROP STAGE	WEED	WEED STAGE	RATE mL/ha	STATE	CRITICAL COMMENTS
		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	Use 75mL/ha rate only in combination with MCPA LVE.
	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.
		Volunteer chickpeas, lentils and safflower	Up to 6 leaf	250		
		Volunteer faba beans and lupins	Up to 4 leaf	250		Faba beans and lupins will only be suppressed.
		Volunteer field peas	Maximum 10cm high or 6 nodes	150		For the control of annual grasses, Macspred Clopyralid may be tank mixed with haloxyfop herbicides.
		Volunteer medics and seedling lucerne	Up to 8 leaf	150		
		Volunteer sub-clover	Up to 6 leaf	150	1	
		Volunteer vetch	Runners up to 10cm maximum 16 leaf	100		
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 Hand gun: 500mL/100L of water Boom spray:	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

CROP	CROP STAGE	WEED	WEED STAGE	RATE mL/ha	STATE	CRITICAL COMMENTS
		Thistles including: Nodding Variegated Scotch Spear Slender 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/1L of water Hand gun: 250mL/100L of water	NSW, ACT, Vic, Tas, SA and Qld only	coverage is essential. Apply in 200 to 250L of water/ha. BOOM SPRAYING: Use the higher rates of Macspred Clopyralid 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 Macspred Clopyralid 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 Macspred Clopyralid 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 Macspred Clopyralid 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
						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

CROP	CROP STAGE	WEED	WEED STAGE	RATE mL/ha	STATE	CRITICAL COMMENTS
Pastures and fallow land	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. DO NOT apply to thistles over 20cm in diameter. When thistles are over 20cm in diameter use Macspred Clopyralid plus MCPA (referred to above). Clover Damage: Damage to white clover will be no greater than damage with MCPA alone and less than damage from Macspred Clopyralid plus MCPA mixtures. Damage to sub-clover may be greater than with MCPA or 2,4-D alone. DO NOT 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. NOTE: 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	NSW, ACT, Vic and Tas only	For effective control apply when bushes are growing actively. Large trees will not show complete necrosis.
				Boom and aerial spray: 5L/ha (weeds 30cm to 2m)		HANDGUN: Means high volume NOT 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.
				7L/ha (weeds 2 to 4m)		BOOM AND AERIAL SPRAYING: 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 antievaporant oil such as Ulvapron. Mix Macspred
				8.5L/ha (weeds 4 to 8m)		Clopyralid 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 UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION