



Product Name: ECHEM 2,4-D 625 AMINE HERBICIDE
APVMA Approval No: 66440/128190

Label Name:	ECHEM 2,4-D 625 AMINE HERBICIDE
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Signal Headings:	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
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Constituent Statements:	625 g/L 2,4-D PRESENT AS THE DIMETHYLAMINE AND DIETHANOLAMINE SALTS
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Mode of Action:	GROUP I HERBICIDE
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Statement of Claims:	For the control of broadleaf weeds in fallow before direct drilling or sowing of cereals and pastures; and in cereal crops, pastures, sugar cane, peanuts, softwood and hardwood plantations, oil tea tree and non agricultural areas as per the directions for use. THIS IS A PHENOXY HERBICIDE THAT CAN CAUSE SEVERE DAMAGE TO NATIVE VEGETATION AND SUSCEPTIBLE CROPS SUCH AS COTTON, GRAPES, TOMATOES, OILSEED CROPS AND ORNAMENTALS.
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Net Contents:	1000L 110L 200L 20L
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Restraints:	This section contains file attachment.
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Directions for Use:	This section contains file attachment.
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Other Limitations:	IN TASMANIA, THIS PRODUCT MAY ONLY BE USED FROM 15 APRIL TO 15 SEPTEMBER UNLESS OTHERWISE PERMITTED BY THE REGISTRAR OF PESTICIDES.
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Withholding Periods:	<p>WITHHOLDING PERIODS:</p> <p>Pasture, Cereal Crops - DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION.</p> <p>Crop Harvest- NOT REQUIRED WHEN USED AS DIRECTED.</p> <p>Fallows (for control of lucerne)- DO NOT GRAZE, CUT FOR AT LEAST 21 DAYS AFTER SPRAYING.</p>
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Trade Advice:	
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General Instructions:	<p>GENERAL INSTRUCTIONS:</p> <p>Before opening, carefully read Directions for Use, Precautionary Statements, Safety Directions and First Aid Instructions.</p> <p>APPLICATION INFORMATION:</p> <p>BOOM SPRAYING - Use 30 – 120 L/ha of water.</p> <p>AERIAL SPRAYING - Use 10 – 90 L/ha of water</p> <p>EQUIPMENT MAINTENANCE AND USAGE</p> <p>Equipment that has been used for this chemical should not be used for the application of other materials to sensitive plants, unless it has been well washed out with hot soapy water or 1% solution of ammonia followed by several clean water rinses</p> <p>COMPATIBILITY</p> <p>eChem 2, 4-D 625 Amine Herbicide is compatible in tank mixes with 500 g/L Dicamba, 500 g/L Diuron Flowable, 900 g/kg Diuron, 750 g/kg Chlorsulfuron, 250 g/L Paraquat, Propon*, 900 g/kg Atrazine, 500 g/L Atrazine Flowable, Paraquat & Diquat mix, Tordon 50D*, Tribunex* and Bumper*.</p> <p>* Registered trademark.</p>
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Resistance Warning:	<p>RESISTANT WEEDS WARNING:</p> <p>GROUP I HERBICIDE</p> <p>eChem 2,4-D 625 Amine Herbicide is a member of the Phenoxys group of herbicides. eChem 2,4-D 625 Amine Herbicide has the disruptors of plant cell growth mode of action. For weed resistance management, eChem 2,4-D 625 Amine Herbicide is a Group I Herbicide. Some naturally occurring weed biotypes resistant to eChem 2,4-D 625 Amine Herbicide and other Group I Herbicide 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 eChem 2,4-D 625 Amine Herbicide or other Group I Herbicides.</p> <p>Since the occurrence of resistant weeds is difficult to detect prior to use, eChem (Australia) Pty Ltd accepts no liability for any losses that may result from the failure of eChem 2,4-D 625 Amine Herbicide to control resistant weeds.</p>
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Precautions:	<p>PRECAUTIONS</p> <p>RE-ENTRY PERIOD</p> <p>DO NOT hand harvest sugar cane for at least 1 day after application.</p>
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	If re-entering treated areas before the spray has dried, workers should wear overalls, elbow-length gloves and water-resistant footwear. Clothing should be laundered after each day's use.
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Protections:	<p>PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS DO NOT spray cereals if Lucerne is present. DO NOT spray crops or weeds outside the stages indicated in "Critical Comments" as damage, loss of yield or inadequate weed control may result. DO NOT apply under weather conditions, or from spraying equipment, that may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures. Avoid spray drift and vapour movement onto susceptible crops such as cotton, tobacco, tomatoes, vines, lupins, vegetables, fruit trees, legume crops and pastures, oilseed crops or other susceptible crops and trees (e.g. Kurrajongs, Belahs and Eucalypts).</p> <p>PROTECTION OF LIVESTOCK Low hazard to bees. May be applied at any time as recommended in the Directions for Use.</p> <p>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT: Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.</p>
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Storage and Disposal:	<p>Store in 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 chemical 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.</p> <p>Returnable/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>Poisonous if absorbed by skin contact, inhaled or swallowed. Corrosive to the eyes and skin. Will irritate the nose and throat. Avoid contact with the eyes and skin. Do not inhale vapour or spray mist. When opening the container and preparing spray or using undiluted concentrate, wear chemical resistant waterproof clothing over a layer of normal clothing and a washable hat, elbow-length chemical resistant gloves, impervious footwear and full facepiece respirator with organic vapour/gas cartridge or canister. If applying by boomspray equipment with enclosed operator's cab and air filtration or aerial spraying equipment, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length chemical resistant gloves. If applying by boomspray equipment with open operator's cab or hand-held spray equipment wear chemical resistant waterproof clothing over a layer of normal clothing and a washable hat, elbow-length chemical resistant gloves and full facepiece respirator with organic vapour/gas cartridge or canister. If clothing becomes contaminated with product remove clothing immediately. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately 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, respirator and if rubber wash with detergent and warm water, face shield or goggles and contaminated clothing.</p>
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First Aid Instructions:	If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26, New Zealand 0800 764 766.
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First Aid Warnings:	
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DIRECTIONS FOR USE

Table 1. Pre-Sowing: FALLOW, STUBBLE SPRAY PRIOR TO DIRECT DRILLING OR SOWING					
CROP	TARGET WEEDS	STATE	RATE	CRITICAL COMMENTS	USAGE RESTRICTIONS
Winter Cereals, Grain Legumes (peanuts Qld, NT only) and Canola	Refer Weed Table	All States	225 mL - 1.7 L/ha	<p>Observe plant back periods given in the table in this leaflet. Can be mixed with chlorsulfuron or paraquat where grasses are present.</p> <p>Select an appropriate rate from the weed table.</p> <p>For Skeleton weed, spraying should only be done 6-8 weeks before anticipated sowing date and subsequent cultivation limited to a minimum.</p>	<p>USAGE RESTRICTIONS APPLY: See APPENDIX 1: Timing restrictions for spraying peanuts and APPENDIX 5: Risk mitigation measures for Dryland cropping, pre-emergent uses.</p>

Table 2. Post-Sowing: PRE-EMERGENCE AND POST EMERGENCE USES					
CROP	TARGET WEEDS	STATE	RATE	CRITICAL COMMENTS/USAGE RESTRICTIONS	
Wheat	Refer Weed Table	NSW, SA, ACT only	320 mL - 1.7 L/ha	Apply after the first node can be felt at the base of a tiller and before swelling of the head can be felt in a tiller (NSW, ACT, SA only)	
		Vic. only	225 mL - 1.4L/ha	Apply from tillering to boot stage (Vic. only)	
		Qld only	560 mL - 1.4L/ha	Apply from mid to before the boot stage (Qld. only)	
		Tas only	800 mL - 1.4L/ha	Apply at 5 leaf to fully tillered (Tas only)	
Barley		NSW, SA, ACT only	320 mL - 1.4L/ha		
		Vic only	225 mL - 1.4L/ha		
		Qld only	560 mL - 1.4L/ha		
Cereal Rye, Triticale		NSW, SA, ACT only	320 mL - 1.4L/ha		
		Vic only	225 mL - 1.4L/ha		
Oats		NSW, ACT, SA only	320 - 800 mL/ha		
		Vic only	225 - 800 mL/ha		
Cereals: Wheat, Oats, Barley	Cape Tulip	W.A. only	640 mL - 1.3 L/ha	Apply from 5 leaf stage up to jointing stage (Zadoks 15-33).	
	Dock, Flatweed, Saffron Thistle		1.1 L/ha	Apply after the 6 leaf stage (Z 16) for Cranbrook, Jacup, Aroona and Spear Wheat and Mortlock Oats to avoid possible damage.	
	Indian Hedge Mustard, London Rocket, Lupin, Matricaria, Rapistrum, Wild Radish		800 mL	DO NOT spray if lucerne is present.	
	Wild Turnip		640 mL	WEED STAGE: 10-15 cm. Docks should be sprayed before 5 leaf stage. Cape Tulip – use low rate for cormils only.	
	Capweed, Doublegee, Erodium, London Rocket, Lupin, Mustard, Rapistrum, Wild Radish, Wild Turnip		200 mL/ha Plus 500 mL/ha Diuron (500 g/L)	Apply when crop has 4-5 leaves and most weeds have germinated and are in the 2-5 leaf stage. Crop and weeds should be dry at the time of application. Some temporary yellowing of the crop may occur after application. Undersown sub-clovers may be slightly retarded. DO NOT apply to undersown medics.	
Wheat, Barley	Wild Radish	Vic, SA, NSW, ACT only	800 mL/ha plus 850 g/ha Methabenzthiazuron (700 g/kg)	Spray 2-6 weeks after sowing and not later. DO NOT use on crops undersown with lucerne.	
Millet	Refer Weed Table	NSW, SA, ACT, Vic. only	560 mL - 1.1 L/ha	Spray when secondary roots have developed, when fully tillered and before heads start to form at the base of the tillers. Do not use on Panorama Millet or Panicum.	
		Qld only	560 - 900 mL		
Sacaline, Broom Millet, Millet	Cape Tulip, Docks, Saffron Thistle, Indian Hedge Mustard, London Rocket, Lupin,	WA only	1.1 L/ha	Spray when crop is 10-30 cm high and secondary roots have developed and before tasselling. Apply as directed spray to weeds.	

Table 2. Post-Sowing: PRE-EMERGENCE AND POST EMERGENCE USES					
CROP	TARGET WEEDS	STATE	RATE	CRITICAL COMMENTS/USAGE RESTRICTIONS	
	Rapistrum, Radish, Wild Turnip				
Sugar cane (Q80, Q96, and H56 varieties)	Bellvine	Qld, NSW only	280 mL/100 L water	Apply in spring as a direct spray.	USAGE RESTRICTIONS APPLY: See APPENDIX 3: Timing restrictions for spraying sugarcane.
	Morning Glory		560 mL – 1.1 L/ha	Apply in summer using a high clearance tractor.	
	Pink convolvulus, Star of Bethlehem		1.1 L/ha	Apply in autumn by aircraft.	
Sugar Cane	Bindy Eye (Star Burr), Blue Top, Cobbler's Pegs, Fleabanes, Jute, Leucas, Needle Burr, Spear Thistle, Water Primrose, Ipomea Vines, Convolvulus Vines	Qld, NSW only	1.8 L - 3.5 L/ha	Add 60 – 120 mL 60 – 100 % non-ionic surfactant to 100 L of spray mixture. Agitate well. DO NOT use on Q63, Q67, Q80 or Q96 varieties.	
	Chinese Mint, Blue Snakeweed		3.5 L/ha		
Peanuts	Broadleaf Weeds, except Noogoora Burr, Grasses, except Mossman Burr	Qld only	1.8 - 3.6 L/ha	<p>LOWER RATE: Apply as BAND SPRAY as soon as possible after planting in a 55 cm band.</p> <p>HIGHER RATE: Apply as OVERALL SPRAY after planting and before crop emergence. Some crop damage may occur if heavy rain falls between application and crop emergence.</p>	USAGE RESTRICTIONS APPLY. SEE APPENDIX 1: Timing restrictions for spraying peanuts.
Harvest Aid or Salvage Spray -Winter Cereals	Desiccate Broadleaf Weeds	All States	1.2 - 1.7 L/ha	Apply after dough stage.	
Bananas including Cavendish	To destroy banana suckers	NSW, Qld only	160 mL/10 L/ha water INJECT AT THE RATE OF: 15 mL per fully grown plant, 10 mL per medium sized plant, 5 mL for small sucker.	Apply by stem injection only.	
		Qld only	320 mL/100 L/ha water	Allow suckers from corms of treated plants to form broad adult leaves, then spray. Isolated spots may require a second spray.	
Common Stylo forage or seed crops	Refer to Weeds table		800 mL	Apply post-emergence when weeds are 3 weeks old and crop is at least 3 weeks old.	
Caribbean Stylo forage or seed crops			800 mL -1.6 L/ha	Apply post-emergence when crop is 3 weeks old.	
Hardwood and softwood plantations	Broadleaf and woody weeds as per product labels including grousel and <i>pinus</i> spp. wildings	All States	Maximum rate 1.6 L/ha	Apply a single preplant application and/or a maximum of 2 post plant applications using shielded sprayers within the first 2 years following planting. Apply using aircraft (rotary wing only) or ground based equipment. DO NOT spray over or into watercourses. Products may be mixed with glyphosate for pre-plant spray operations.	

Table 2. Post-Sowing: PRE-EMERGENCE AND POST EMERGENCE USES				
CROP	TARGET WEEDS	STATE	RATE	CRITICAL COMMENTS/USAGE RESTRICTIONS
Oil Tea Tree	Refer to Weeds table		Apply at a maximum of 960 mL/ha as per label directions	Apply as a shielded spray. Avoid contact with foliage, green stems, exposed non-woody roots, desirable plants and trees as severe injury or destruction may result. Apply following harvest as a blanket spray only after: <ul style="list-style-type: none"> • All residual tea tree foliage has been removed by mechanical shaving, or by using a burner, • No swollen buds are present on stumps. NOTE that buds can burst 8 days after harvest in summer and • Surface of cut stumps are dry before spraying commences.
	Purple Top (<i>Verbena bonariensis</i>)		Apply at 960 L/ha plus 720 g ai glyphosate/ha in tank mix.	Apply as a shielded spray. Avoid contact with foliage, green stems, exposed non-woody roots, desirable plants and trees as severe injury or destruction may result.

Table 3. PASTURES AND NON-AGRICULTURAL USES					
SITUATION & CROP	TARGET WEEDS	STATE	RATE	CRITICAL COMMENTS/USAGE RESTRICTIONS	
Pastures & non agricultural	Refer Weed Table	Qld, NSW, ACT, Tas, SA only	560 mL - 1.7 L/ha	Pasture legumes including lucerne, clovers and medics may be damaged unless well protected by grasses. Spot spraying is preferred.	USAGE RESTRICTIONS APPLY. SEE APPENDIX 2: Application and timing restrictions for application to pastures
	Galvanised burr	NSW, ACT only	320 mL/100 L water	Apply to young actively growing weeds. Ensure thorough coverage of plants. NOTE: Treated plants need to be burnt to destroy seeds.	
	Amsinckia, Annual Thistles, Bindweed, Caltrop, Capeweed, Docks, Flatweed, Heliotrope, Mustard, Paterson's Curse (Salvation Jane), Ragwort, Saffron thistle, Spear Thistle, Three Cornered Jack (Doublegee, Spiny Emex), Wild Radish, Wild Turnip.	WA only	1.1 L – 2.4 L/ha	For pastures not containing legumes. Only seedling docks, spear thistle and saffron thistle will be controlled. SUMMER WEEDS: Use low rate for seedlings, 1.6 - 2.4 L/ha for larger plants. Stock poisoning may occur when grazed after spraying if large amounts present, particularly Heliotrope. WINTER WEEDS: Use low rate for seedlings, 1.6 - 2.4 L/ha for larger plants. If stock are present use spray grazing rates.	
	Afgan Melons		1.6 L/ha plus 1% crop oil	Spray when plants are actively growing preferably before flowering or vining.	
	Paddy melons		800 mL - 1.1 L/ha		
	Prickly Saltwort (Roly poly)		1.6 L	Spray when plants are small.	
	Stinkwort		1.6 - 3.2 L/ha Plus Wetting agent (1000 g/L)	Best results are obtained when plants are small. Use higher rate on larger plants.	
	Dove Weed		3.2 L/ha	Spray after good emergence of seedlings.	

Table 3. PASTURES AND NON-AGRICULTURAL USES				
SITUATION & CROP	TARGET WEEDS	STATE	RATE	CRITICAL COMMENTS/USAGE RESTRICTIONS
Agricultural non-crop areas, commercial and industrial areas, pastures and rights of-way	<i>Pimelea</i> sp.	All States	800 mL / ha + wetter	BOOM SPRAY in 1500 L/ha spray volume. To be applied when plant is green. DO NOT apply more than 2 applications per year with a minimum re-treatment interval of 21 days between consecutive applications. This product can be used to create and maintain hospital areas for livestock suffering from <i>Pimelea</i> poisoning. <i>Pimelea</i> may become more palatable after herbicide application; stock should be excluded from herbicide-treated areas until sprayed <i>Pimelea</i> plants are leafless, seedless and obviously dead.
			55 mL per 100 L water + wetter	SPOT SPRAY. Thoroughly wet all foliage to the point of run-off. (~1500L/ha spray volume)
Pastures, Rights of way, Industrial.	Boxthorn, Boneseed, Hawthorn	Vic, SA only	Undiluted	Apply as an undiluted spray to freshly cut stumps.
	Groundsel	Qld, NSW, ACT, SA only	320 mL/100 L water	HIGH VOLUME: Thoroughly wet plants.
		Tas only	240 mL/15 L water	CUT STUMP: Swab the cut stump within one hour of cutting. Apply by a pouring can.
		Qld, NSW, ACT, SA, Tas only	2.9 – 3.6 L/ha	AERIAL APPLICATION: Spray when Groundsel is actively growing.
	Lantana	Qld, NSW, ACT, SA only	320 mL/100 L water	Use a VERY COARSE spray with sufficient pressure to penetrate canopy and wet stems as well as foliage. Spray at the end of a wet summer (March to May). Defoliation should occur but respraying of new growth will be necessary in following Autumn. Broadcast grass seed and keep stock off following Summer to allow the pasture to establish. Damage may result to pasture legumes.
	Mother of Millions	NSW only	400 mL /100 L water	Handgun only: A thorough coverage of leaves and plantlets is necessary. Use 1000g/L non-ionic surfactant at the rate of 1 mL of surfactant per 1 L mixture.
Noogoora Burr, Scarlet Pimpernel (seedlings only), Weir Vine (<i>Ipomea</i>), White Eye (Mexican clover)	Qld only	160 mL/100 L water	In all cases apply to young, actively growing weeds, ensuring through coverage.	

Table 3. PASTURES AND NON-AGRICULTURAL USES					
SITUATION & CROP	TARGET WEEDS	STATE	RATE	CRITICAL COMMENTS/USAGE RESTRICTIONS	
	Annual & Perennial Pigweed, Artichoke Thistle, Bathurst Burr, Billygoat Weed, Blue Snake Weed, Burr Medic, Clockweed*, Fleabanes, Galvanised Burr, Hemlock, Hoary Cress ^o , Kyalinga Weed (Whisker Grass), Knobweed, Milky Cotton Bushes, Parthenium Weed, Paterson's Curse (Salvation Jane), Saffron Thistle, Star Burr, Thornapple, Variegated Thistle*		320 mL/100 L water	* Spray rosette stage ^o Repeat spraying necessary	
	Rubber Vine		160 mL/10 L water	Apply to freshly cut stump.	
	Sesbania Pea		560 mL – 900 mL		
	Water Hyacinth		3.5 – 5.3 L/ha	Apply in 2200 to 3300 L water/ha	
	Wild Tobacco Tree		240 mL/15 L/water	Cut Stump Treatment: Swab the cut stump within one hour of cutting. Apply by a pouring can.	
Conservation tillage - Direct Drilling, Surface Sowing or Fallow maintenance	Charlock, Mustards, Shepherd's Purse, Saffron, Slender, Spear and Variegated* Thistles, Turnip Weed, Wild Radish, Wild Turnip.	All States	560 mL – 1.6 L/ha	Apply to actively growing young plants. Before sowing: Observe plant back periods given in the table on this leaflet. * Warning: Treated plants may become toxic to stock.	
	Clover, Sorrel		1.1 L/ha plus 280 - 400 mL/ha of 500 g/L dicamba	Apply to actively growing plants in autumn. Do not sow pasture seed for at least 30 days after application.	
	Lucerne		2.4 L/ha	Spray in spring when lucerne is actively growing using a minimum spray volume of 50 L/ha. Heavily graze lucerne during winter and early spring to reduce crown and root reserves. Allow lucerne to regrow to 15-30 cm tall before spraying. Successful lucerne stand reduction is more likely if >70 mm of rain falls in the 6-8 weeks prior to application. Add either 0.5% Uptake spray oil or a non-ionic surfactant. Maximum air temperature should not exceed 30°C.	
Lawns, Playing Fields	Refer Weed Table	Qld, NSW, ACT only	1.5 - 3 mL/1 L water OR 1.6 – 3.2 L/ha	Wet foliage thoroughly. DO NOT mow lawn for 1 week before and at least 1 week after application. DO NOT use on Buffalo grass (WA only)	USAGE RESTRICTIONS APPLY. SEE APPENDIX 4: Application restrictions for TURF
		WA only	40 mL/10 to 15 L/ha water/100 m ²		

Table 4. PASTURES – SPRAY/GRAZE TECHNIQUES					
	Precaution: An increased quantity of poisonous plants may be eaten by stock using spray-graze eg. caltrop, capeweed, Paterson's curse and variegated thistle and deaths could result from causes such as nitrate poisoning. With Paterson's curse preferably graze stock soon destined for slaughter and avoid extended periods of grazing. Avoid grazing with young or breeding stock. Do not graze horses or pigs on Paterson's curse.				
CROP	TARGET WEEDS	STATE	RATE	CRITICAL COMMENTS	USAGE RESTRICTIONS
Pastures - Spray/Graze Techniques	Amsinckia, Thistles, Capeweed, Doublegee, Mustards, Paterson's Curse, Wild Turnip, Wild Radish, Docks, Geranium, Erodium	SA only	560 mL/ha	Apply from 6 weeks after opening rains in autumn until the end of August. Seven days after spraying stock paddock at 4-5 times normal rate, preferably with sheep. Maintain this level of grazing for 6 weeks or until pasture shows signs of over grazing. Then return to	USAGE RESTRICTIONS APPLY. SEE APPENDIX 2: Application and timing restrictions for application to pastures
	Annual Thistles, Capeweed, Doublegee, Geranium, Mustards, Paterson's Curse,	Tas, Vic only			

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CROP	TARGET WEEDS	STATE	RATE	CRITICAL COMMENTS	USAGE RESTRICTIONS
	Saffron thistle, Slender Thistle, Spear Thistle, Turnip,			normal stocking levels. Use high stocking rates in following spring to prevent weeds from flowering. Repeat treatments may be required for 2-3 years for complete control.	
	Amsinckia, Capeweed, Docks (seedlings only), Doublegee, Mustard, Paterson's Curse, Wild Radish, Wild Turnip, Annual Thistles.	WA only	600 - 800 mL/ha		
	Saffron thistle, Spear Thistle		1.2 L/ha	Apply to Saffron Thistle at the end of September when plants are running up to flower. Sub-clovers may be damaged at this rate and use is not recommended for all medic pastures.	
	Melons		1.6 L/ha Plus 1% oil	Heavy stocking on young plants sprayed with 800 mL/ha provides effective control.	
	Docks	Vic only	1.1 L/ha	Apply in September only and follow other recommendations above.	
	Caltrop, Capeweed, Charlock, Mustards, Paterson's Curse (Salvation Jane), Shepherd's Purse, Saffron, Slender, Spear and Variegated Thistle*, Turnip Weed, Wild Radish, Wild Turnip	NSW, ACT only	280 mL - 1.1 L/ha	Spray actively growing 6-8 week old weeds. Introduce stock 7-10 days after spraying, preferably sheep (cattle are less effective). Stocking rate should be at least 5 times heavier than normal until weeds have been reduced, but before survival of desirable pasture species is threatened. Lucerne and medics may be damaged and should be grazed shortly before spraying. Other legumes may be affected. *Warning: treated plants may become toxic to stock	

Table 5. OTHER USES

SITUATION	METHOD	TARGET WEEDS	STATE	MIXING RATE/ CRITICAL COMMENTS
Spot Spraying	High Volume Spraying	Refer Weed Table	All States	Add 1/10 th of the rate on the weeds table to 150 litres of water. Each 150 litres of mix will cover 1000 m ² (1/10 th ha) eg. If rate in weed table is 1.4 L use 140 mL/150 L water.

MAXIMUM TOLERANCE FOR USE IN WHEAT, BARLEY, OATS AND TRITICALE INCLUDING TOLERANCE FOR UNDERSOWN LEGUMES

CROP	QLD	NSW	VICTORIA		SA	WA	TAS
			Early tillering	Tillered boot stage			
Cereal Rye	-	-	-	-	1.4 L	-	-
Wheat	1.8 L/ha	1.7 L/ha	225 mL/ha	1.4 L/ha	1.7 L/ha	1.7 L/ha	1.7 L/ha
Barley	1.4 L/ha	1.4 L/ha	225 mL/ha	1.4 L/ha	1.4 L/ha	1.4 L/ha	1.4 L/ha
Oats	-	800 mL/ha	225 mL/ha	800 mL/ha	900 mL/ha	1.3 L/ha	-
Triticale	-	1.4 L/ha	225 mL/ha	-	1.4 L/ha	1.7 L/ha	800 mL/ha
Undersown clovers	-	-	225 mL/ha	-	-	680 mL/ha	560 mL/ha
Undersown medics	-	-	225 mL/ha	-	-	Nil	560 mL/ha
Undersown lucerne	-	-	225 mL/ha	-	-	Nil	-

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

Additional USAGE restrictions apply in some crops, states and seasons, see restriction tables below, Appendix 1-5.

Appendix 1: Timing restrictions for spraying peanuts			
Situation	Rate	Region	Timing Restriction
			DO NOT APPLY DURING THE MONTHS
Broadcast spraying, prior to sowing (peanuts)	Up to 1.4 L/ha	Cape York	October and November
		Northern Gulf	October and November
		Northern Territory	October and November
		Wet Tropics	No timing restrictions
		Burdekin	October
		Mackay/Whitsunday	September to December
		Mary/Burnett	October to November
		SE Queensland	August to May
	Up to 1.7 L/ha	Cape York	October and November
		Northern Gulf	October and November
		Northern Territory	October and November
		Wet Tropics	No timing restrictions
		Burdekin	October
		Mackay/Whitsunday	August to December
		Mary/Burnett	September to November
SE Queensland		Use not supported	
Band spraying, post-sowing pre-emergence (peanuts)	Up to 1.8 L/ha	Queensland dryland	No timing restrictions
		Cape York	No timing restrictions
		Northern Gulf	October and November
		Northern Territory	October and November
		Wet Tropics	No timing restrictions
		Burdekin	No timing restrictions
		Mackay/Whitsunday	No timing restrictions
		Mary/Burnett	No timing restrictions
		SE Queensland	October to January
Broadcast spray, post-sowing pre-emergence (peanuts)	Up to 3.6 L/ha	Queensland dryland	June to August
		Cape York	October and November
		Northern Gulf	October and November
		Northern Territory	October and November
		Wet Tropics	October and December
		Burdekin	September and October
		Mackay/Whitsunday	August to December
		Mary/Burnett	April to January
		SE Queensland	Use not supported

Appendix 2: Application and timing restrictions for application to pastures

DO NOT apply above maximum rate (L/ha) below OR label rate, whichever is LOWEST

Pastures (prior to sowing, conservation tillage)	State	Summer	Autumn	Winter	Spring
	Queensland & NT	5.1	5.1	5.1	5.1
	New South Wales & ACT	5.1	5.1	5.1	5.1
	Victoria	0.6	1.7	5.1	1.7
	Tasmania	0.6	1.2	3.6	1.7
	South Australia	1.2	1.7	5.1	3.6
	Western Australia	1.7	3.6	5.1	3.6

Pastures (established)	State	Summer	Autumn	Winter	Spring
	Queensland & NT	7.2	7.2	7.2	7.2
	New South Wales & ACT	7.2	7.2	7.2	7.2
	Victoria	1	1.9	7.2	3.6
	Tasmania	0.7	1.7	5.1	3.2
	South Australia	1.4	3.2	7.2	5.1
	Western Australia	3.6	5.1	7.2	5.1

Appendix 3: Timing restrictions for spraying SUGARCANE

Rate	Region	Timing Restriction
		DO NOT APPLY DURING THE MONTHS
Up to 1.7 L/ha	Wet Tropics	No timing restriction
	Burdekin	No timing restriction
	Mackay/Whitsunday	October to November
	Mary/Burnett	October to November
	Northern NSW	No timing restriction
Up to 3.6 L/ha	Wet Tropics	October to December
	Burdekin	September to October
	Mackay/Whitsunday	August to December
	Mary/Burnett	April to January
	Northern NSW	October to November

Appendix 4: Application restrictions for TURF

DO NOT apply above maximum rate (L/ha) below OR label rate, whichever is LOWEST

Turf	State	Rate (L/ha)
	Queensland & NT	3.2
	New South Wales & ACT	3.2
	Victoria	2.5
	Tasmania	2.5
	South Australia	2.5
	Western Australia	4.0

If applying to golf courses in Tasmania, DO NOT apply to fairways adjacent to natural water bodies.

Appendix 5: Risk mitigation measures for Dryland cropping, pre-emergent uses

Situation	Risk mitigation measures
Dryland cropping, preparatory spray	Only apply in no-till farming systems (Tasmania, South Australia)

Winter cereals, pre-emergence uses	Only apply in no-till farming systems (Tasmania, South Australia, Western Australia)
Summer cereals, pre-emergent uses	Only apply in no-till farming systems (Tasmania, South Australia)

WEED TABLE:

NOTE: Where weeds are to be sprayed in a CROP or PASTURE (other than spot spraying), use only the rates given for the particular crop or situation indicated under the Directions for Use Table.

In most cases, this will give control, however some hard to kill weeds or those in advanced stages of growth may only be suppressed. The rates listed in the Weed Table below are spot spraying rates for use in crop or pasture, or for use where weeds only are present and no crop or pasture is involved. Use at these rates in a crop or pasture other than for spot spraying may cause damage.

This product should only be used in those states where a rate or range of rates is indicated for the particular weeds listed.

WEEDS CONTROLLED	APPLICATION RATE PER HECTARE							CRITICAL COMMENTS
	CROP						PASTURES	
	VIC	NSW, ACT	SA	QLD	TAS	WA	NSW, SA, QLD, Tas only	
Amaranthus spp.	-	560mL -1.1L	-	900 mL	-	-	-	Spray young plants.
Amsinckia	-	-	-	-	-	1.1 L	-	
Apple of Peru	-	560mL -1.1L	-	900 mL	-	-	-	Spray young plants. Susceptible when young.
Bathurst Burr	-	800mL -1.1L	1.7 - 2.2L	900 mL	-	-	800mL-1.1L (Not SA)	
Bellvine	-	1.8 L	-	1.8L	-	-	-	Spray before seeding. Advanced stages susceptible.
Billygoat weed	-	3.4 L	-	3.4 L	-	-	-	Spray at young stage.
Bindweed	-	-	-	-	-	1.1 L	-	
Blackberry Nightshade	-	560mL -1.1L	-	900 mL	-	-	-	
Black eyed Susan	-	1.8 L	-	1.8 L	-	-	-	Apply at pre-flowering, preferably young stages.
Blue snakeweed	-	1.8 L	-	1.8 L	-	-	-	Spray seedlings at young stages only.
California Burr	-	800mL -1.1L	-	900 mL	-	-	800 mL -1.1L (Not SA)	Spray seedlings only.
Canola/Rapeseed	-	800mL-1.7L	-	-	-	-	-	
Cape Tulip	-	-	-	-	-	640mL-1.3L	-	Low rate for cormils only.
Capeweed	1.4 L	-	1.7 L	-	1.4 L	1.1 L	1.7-2.8L	Spray seedlings to rosette stage.
Caltrop	-	800mL -1.7L	-	900 mL	-	1.1 L	-	Moderately susceptible.
Castor Oil Plant	-	3.4 L	-	3.4 L	-	-	-	Spray at young stage.
Charlock	560-800 mL	560mL -1.1L	560 mL	-	1.4 L	-	800 mL -1.1L	Spray at rosette stage.
Clover	-	1.2 L	-	-	-	-	-	
Cobbler's pegs	-	1.8 L	-	1.8 L	-	-	-	Apply at pre-flowering, preferably young stages.
Common ice Plant	-	-	1.1 L	-	-	-	-	
Common Sida	-	1.8 L	-	1.8 L	-	-	-	Spray seedling or young stages only.
Common Sowthistle	-	1.8 L	-	1.8 L	1.4 L	-	-	Apply at pre-flowering, preferably young stages.
Docks	1.4 L	-	1.4 L	1.4 L	1.4 L	1.1 L	3.2 L (SA only)	Spray multiple leaf stage - effective only on seedlings.
Doveweed	-	-	-	-	-	1.1 L	-	
Fat Hen	-	560mL -1.7L	-	900 mL	1.4 L	-	-	Spray pre-flowering.
Flannel weed	-	1.8 L	-	1.8 L	-	-	-	Spray on seedlings or young stages only.
Flatweed	-	-	-	-	-	1.1 L	-	
Fumitory - red	-	-	1.7 L	-	-	-	-	
Fumitory - white	800 mL	-	560 mL	-	-	-	-	Spray at multiple leaf stage.
Helliotrope	-	-	-	-	-	1.1 L	-	
Hexham Scent/King Island Mellilot	1.4L	-	1.1 L	1.4 L	-	-	1.1 - 1.7 L	Spray multiple leaf stage before seeding.
Hoary Cress	900mL -1.4L	1.1 - 1.7 L	1.4 L	1.4 L	-	-	1.4 - 1.7 L	Spray rosettes and pre-flowering.
Hogweed/Wireweed	1.4L	-	-	1.4 L	-	-	-	Spray at multiple leaf stage (Vic.). Spray at seedling and young plant stage (Qld).
Horehound	-	-	1.4 L	-	-	-	2.2-3.2L SA only	Spray seedlings.
Indian Hedge mustard	-	-	-	-	1.4 L	1.1 L	-	
Khaki Weed	-	-	-	-	-	-	1.1-2.2 not SA	Spray seedlings only
Knobweed	-	-	-	1.8-3.4L	-	-	-	Lower rate for seedlings; higher rate for later stages
Lincoln Weed	-	-	1.7 L	-	-	-	-	Spray early rosettes.
London Rocket	-	-	-	-	-	1.1 L	-	
Lupins	-	800mL -1.7L	-	-	-	1.1 L	-	
Melons – Camel, paddy	-	560mL -1.1L	-	-	-	-	-	

WEEDS CONTROLLED	APPLICATION RATE PER HECTARE							CRITICAL COMMENTS
	CROP						PASTURES	
	VIC	NSW, ACT	SA	QLD	TAS	WA	NSW, SA, QLD, Tas only	
Mexican Poppy	-	-	-	1.4 L	-	-	-	Spray seedlings - plants become more resistant with age.
Mintweed	-	1.1 L	-	900mL	-	-	-	Spray seedlings - resistant in later stages.
Morning Glory	-	1.8 L	-	1.8 L	-	-	-	Spray at seedling to flowering stage.
Mustards	225-560mL	560mL-1.1L	560mL-1.4L	900mL	-	800mL	560mL - 1.1L	Spray at 2-4 leaf up to rosette stage.
Needle burr	-	1.8 L	-	1.8 L	-	-	-	Apply pre-flowering, preferably young stages.
New Zealand Spinach	-	1.1 - 1.7 L	-	-	-	-	-	
Noogoora Burr	-	800mL-1.1L	-	900mL	-	-	800mL - 1.1L not SA 1.7 - 2.2L	Spray seedlings only.
Paterson's Curse (Salvation Jane)	-	1.1 – 1.7 L	-	1.4 L	-	1.3 L	-	Spray rosettes or before plants have 10 leaves. Later stages are harder to kill.
Pinkburr (Pink flowered burr)	-	1.8 L	-	1.8 L	-	-	-	Spray seedling or young stages only.
Potato Weed	-	560mL-1.1L	-	900mL	-	-	-	Spray at young stage.
Purpletop	-	3.4 L	-	3.4 L	-	-	-	
Radish	-	-	-	-	-	1.1 L	-	
Ragwort	-	-	-	-	3.8 L	1.1 L	-	Spray up to early rosette stage (Tas only).
Rapeseed	-	800mL-1.7L	-	-	-	-	-	
Rapistrum	-	-	-	-	-	1.1 L	-	
Rough Poppy	-	1.1L	-	-	-	-	-	
Safflower	-	560mL-1.1L	-	-	-	-	800mL – 1.1 L	
Shepherd's Purse	-	1.1 - 1.7 L	-	-	1.4 L	-	-	Spray young rosettes.
Siratro (Purple bean)	-	1.8 L	-	1.8 L	-	-	-	Spray seedling or young stages only.
Skeleton Weed	1.4 L	1.1 – 1.7 L	1.4 L	-	-	-	-	Spray rosettes before aerial growth commences.
Sorrel	1.4 L	1.7 L	1.4 L	-	-	-	-	Only moderately susceptible.
Speedwell-ivy Leaf	-	-	1.1 L	-	-	-	-	
Spinyhead Sida	-	1.8 L	-	1.8 L	-	-	-	Spray seedling or young stages only.
Starburr	-	1.8 L	-	1.8 L	-	-	-	Spray before seeding, advanced stages less susceptible.
Spiny Emex	-	-	-	1.4L	-	-	-	Only young plants are susceptible.
Star of Bethlehem (Cupids Flower)	-	-	-	1.8 L	-	-	-	Spray before seeding, advanced stages less susceptible.
Stinkwort	-	800mL-1.4L	-	-	-	-	1.6 – 3.2 L	
Storkbill/Erodium	-	-	-	-	1.4 L	-	-	Spray seedlings to young rosettes.
Sunflower(seedlings)	1.4 L	560mL-1.4L	-	900mL	-	-	-	
Thistle	-	-	-	-	-	1.1 L	-	
- Annual	-	-	-	-	-	2.7 L	-	
- Californian	-	-	-	-	-	-	3.2 – 3.8 L	Repeated applications may be necessary (NSW, Tas only).
- Saffron	1.1 L	560mL-1.7L	1.4 L	1.4L	950mL	1.1 L	1.1 – 1.7L	Low rate only sufficient to control weeds in crops at rosette stage when spot-sprayed early.
- Slender/Shore	-	800mL-1.7L	-	-	1.4 L	-	1.1 – 1.6L not NSW, Tas	Suppression only.
- Soldier	1.4 L	-	-	-	-	-	1.1 – 1.6 L	Spray young rosette.
- Spear	560mL	-	-	-	1.4 L	-	1.6-3.2L SA only	Spray young rosette.
- Star	-	-	-	-	-	-	1.1-1.7L	Use higher rate as flower stalk appears.
- Variegated	-	560mL-1.7L	-	900mL	1.4L	-	1.6-2.4L not SA	Spray at rosette stage.
Thornapple	-	800mL-1.1L	-	-	-	-	-	Spray seedlings only.
Tridax (Tridax daisy)	-	1.8 L	-	1.8 L	-	-	560mL-1.1L	Spray seedling or young stages only.
Turnip Weed/Rapistrum	-	560mL-1.1L	-	560mL	-	800mL	-	
Wards Weed	-	-	1.1 L	-	-	-	-	
Wild Cabbage	1.4 L	-	-	-	-	-	1.1 - 1.7L	Spray multiple leaves.
Wild Poppy	560mL	-	-	-	-	-	800mL-1.1 L	Spray rosettes.
Wild Radish	1.4 L	1.4-1.7 L	1.4 L	900mL	1.4 L	800mL	560mL-1.1 L	Spray up to young rosette stage.
Wild Turnip	225-560mL	560mL-1.1L	320mL	-	1.4L	640mL	-	Spray 2-4 leaf up to rosette stage.
Vetches/Tares	1.4L	-	1.1L	-	-	-	-	Spray multiple leaf stage.

PLANT BACK PERIODS (DAYS) FOR eChem 2,4-D 625 Amine Herbicide

CROP	RATES		
	Up to 560 mL/ha	560 mL/ha - 1.1 L/ha	1.1 L/ha - 1.7 L/ha
Balansa Clover	7	7	10
Barley ¹	1	1	3
Chickpea ²	7	14	21
Cotton	10	14	21
Faba Beans	7	7	10
Field Peas	7	14	14
Lentils	7	7	10
Linseed	7	7	14
Lucerne	7	7	10
Lupins ⁴	7	14	21
Medic	7	7	10
Narbon Beans	7	7	10
Navybeans	10	10	14
Oats	3	3	7
Perennial Ryegrass	7	7	10
Persian Clover	7	7	10
Phalaris	7	7	10
Canola/Rapeseed ²	14	21	28
Rice	7	7	14
Safflower ²	7	14	21
Sub-Clover	7	7	10
Sorghum ³	3	7	10
Soybean	14	14	21
Sunflower ³	7	10	14
Triticale ¹	1	3	7
Vetch	7	7	10
Wheat ¹	1	3	7
White Clover	7	7	10

IMPORTANT:

WHEN APPLIED TO DRY SOILS AT LEAST 15 mm (1/2 inch) OF RAIN MUST FALL PRIOR TO THE COMMENCEMENT OF THE PLANT BACK PERIOD.

NOTES:

- ¹ In Queensland, no rainfall is required to fall prior to commencement of the Plant Back Period for wheat, barley and triticale.
- ² In Queensland, planting of canola/rapeseed, chickpeas and safflower must be delayed for at least 14 days following rainfall of at least 15 mm.
- ³ In Central Queensland, when using 800 L/ha or less of eChem 2,4-D 625 Amine Herbicide, the Plant back Period for sorghum and sunflower is 1 day irrespective of rainfall.
- ⁴ In WA the Plant back Period for Lupins at all rates is 28 days.

RESTRAINTS:

DO NOT exceed maximum application rate of 7.2 L/ha.

DO NOT apply by hand-held spraying equipment at rates exceeding 5.3 L/ha or 530 mL/100 L.

DO NOT apply by spraying equipment carried on the back of the user (Manually pressurised backpack sprayer).

DO NOT apply by aircraft at rates exceeding 3.6 L/ha.

DO NOT use open mixing/loading equipment if treating more than 50 hectares in one day.

DO NOT apply if heavy rains or storms are forecast within 3 days.

DO NOT irrigate to the point of runoff for at least 3 days after application.

DO NOT apply if crop or weeds are stressed due to dry or excessively moist conditions.

SPRAY DRIFT RESTRAINTS

DO NOT apply by a vertical sprayer.

Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift

DO NOT allow **bystanders** to come into contact with the spray cloud.

DO NOT apply in a manner that may cause an unacceptable impact to **native vegetation, agricultural crops, landscaped gardens** and **aquaculture production**, or cause contamination of plant or livestock commodities, outside the application site from **spray drift**. The **buffer zones** in the relevant buffer zone table/s below provide guidance but may not be sufficient in all situations. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.

DO NOT apply unless the **wind speed** is between 3 and 20 kilometres per hour at the application site during the time of application.

DO NOT apply if there are **hazardous surface temperature inversion** conditions present at the **application site** during the time of application. **Surface temperature inversion conditions** exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.

BOOM SPRAYERS

DO NOT apply by a boom sprayer unless the following requirements are met:

- Spray droplets are not smaller than a VERY COARSE spray **droplet size category**.
- Minimum distances between the **application site** and **downwind sensitive areas** (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for boom sprayers') are observed.

BUFFER ZONES FOR BOOM SPRAYERS:

Application rate	Boom height above the target canopy	Mandatory downwind buffer zones (distance given in metres)				
		Bystander areas	Natural aquatic areas	Pollinator areas	Vegetation areas	Livestock areas
Up to 0.5 L/ha	0.5 m or lower	0	Not Required	0	Not Required	0
	1.0 m or lower		30		25	
Up to 1.8 L/ha	0.5 m or lower		30		25	
	1.0 m or lower		60		60	
Up to 3.0 L/ha	0.5 m or lower		35		35	
	1.0 m or lower		90		90	
Up to 4.4 L/ha	0.5 m or lower		45		45	
	1.0 m or lower		130		130	

AIRCRAFT

DO NOT apply by aircraft unless the following requirements are met:

- Spray droplets are no smaller than a VERY COARSE **spray droplet size category**.
- For maximum release heights above the target canopy of 3 m or 25% of wingspan or 25% of rotor diameter whichever is the greatest, minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones' section of the following table titled 'Buffer zones for aircraft') are observed.

BUFFER ZONES FOR AIRCRAFT:

Application rate	Type of aircraft	Mandatory downwind buffer zones (distance given in metres)				
		Bystander Areas	Natural aquatic areas	Pollinator Areas	Vegetation areas	Livestock areas
Up to 0.9 L/ha	Fixed wing	0	120	0	120	0
	Helicopter		85		80	
Up to 1.5 L/ha	Fixed wing		170		160	
	Helicopter		120		120	
Up to 1.8 L/ha	Fixed wing		190		180	
	Helicopter		130		130	
Up to 3.6 L/ha	Fixed wing		325		300	
	Helicopter		200		200	