RLP
APPROVED

Product Name: AGMATE 2,4-D 300 SL HERBICIDE
APVMA Approval No: 68475/127856

Label Name:	AGMATE 2,4-D 300 SL HERBICIDE

Signal Headings:	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Constituent Statements:	300 g/L 2,4-D present as the isopropylamine salt

Mode of Action:	GROUP I HERBICIDE

Statement of Claims:	For the Control of Emerged Broadleaf Weeds Prior to Sowing Crops and Pastures in Conservation Tillage Situations and for Selective Weed Control in Crops and Situations Detailed in the Directions for Use THIS IS A PHENOXY HERBICIDE THAT CAN CAUSE SEVERE DAMAGE TO NATIVE VEGEATION AND SUSCEPTIBLE CROPS SUCH AS COTTON, GRAPES, TOMATOES, OILSEED CROPS AND ORNAMENTALS. PLEASE READ THE DRIFT WARNING STATEMENT

Net Contents:	10 L - 1000 L

Restraints:	This section contains file attachment.

Directions for Use:	This section contains file attachment.

Other Limitations:	IN TASMANIA, THIS PRODUCT MAY ONLY BE USED FROM 15 APRIL TO 15 SEPTEMBER UNLESS OTHERWISE PERMITTED BY THE REGISTRAR OF PESTICIDES.

Withholding Periods:	Pasture, Cereal Crops – DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 7 DAYS AFTER APPLICATION CROP HARVEST: NOT REQUIRED WHEN USED AS DIRECTED

Trade Advice:	

General Instructions:	Agmate 2,4-D 300 SL Herbicide is a water-soluble liquid product with non-selective herbicidal activity against broadleaf weeds. Agmate 2,4-D 300 SL Herbicide will control emerged weeds only, and provides no residual control although certain plant back periods should be observed. Agmate 2,4-D 300 SL Herbicide is absorbed by plant foliage and accumulates to toxic levels in the regions of growth and reproduction, upsetting the ability of plants to balance the synthesis and use of nutrients. Visible effects are a gradual yellowing and wilting of the plants, which advances to complete browning of above ground growth and deterioration of root systems. Effects may not be apparent for 7-10 days or even up to 21 days under cold or cloudy conditions. DO NOT treat weeds under poor growing or dormant conditions such as occur in drought, waterlogging, disease, insect damage, following frost, weeds heavily covered with dust or silt. Reduced results may also occur if weeds are under stress from previous herbicide application. Rainfall occurring up to 6 hours after application may reduce effectiveness. DO NOT spray if strong winds prevail. Crop Establishment Agmate 2,4-D 300 SL Herbicide is recommended as a herbicide additive to glyphosate for control of emerged weeds prior to crop establishment. When Agmate 2,4-D 300 SL Herbicide is applied prior to crop establishment, certain Plant Back Periods should be observed to ensure that the herbicide has degraded sufficiently to allow safe sowing of the intended crop. This process is largely influenced by moisture, temperature and certain soil characteristics and may be delayed particularly when conditions are cold and dry. Refer to the Plant Back Period table for specific information. In seasons of heavy weed growth, or where the following conditions apply, it may be necessary to further delay sowing until a suitable seedbed can be formed. Conditions, which can delay crop germination and seedling development, include: * Heavy green or decaying weed growth incorporated into the soil; * Soil compaction or crusting; * Cold and wet soils; * Deep seeding; * Prior use of residual or pre-emergent herbicides. To minimise these effects it is suggested that: * Weed bulk be reduced by grazing and cultivating to leave trash on the surface to dry out; * A friable seedbed produced by cultivation, where necessary; * The use of pre-emergent herbicides to be avoided if they might contribute to reduced germination; * A correct seeding depth is used. The preferred alternative is to spray early to control any weeds in their less advanced stages and ensure the seedbed is in a suitable condition for early sowing when soil temperatures are not excessively cold. Application Boom Equipment

Application of Agmate 2,4-D 300 SL Herbicide /glyphosate mixtures in spray volumes of 25-100L/ha is recommended. When chlorsulfuron or metsulfuron are included in the mixture a minimum spray volume of 30L/ha is recommended. When simazine is included in the mixture a minimum spray volume of 100L/ha is recommended. Boom height must be set to ensure double overlap of nozzle patterns at the top of the weed canopy.

Aerial Equipment
Application under hot conditions: High temperature and/or low relative humidity cause excessive evaporation of spray droplets that may reduce results. When temperatures reach 25°C increase water volume to 30L/ha, and increase droplet size to at least 300 SL micron diameter.
DO NOT apply by aircraft when temperature is above 35°C.
DO NOT use in intensive horticultural cropping areas. Thoroughly wash aircraft, especially landing gear after each day of spraying to remove herbicide residue.

Equipment Maintenance
Spray solutions of Agmate 2,4-D 300 SL Herbicide and glyphosate should be mixed, stored and applied only in stainless steel, aluminium, brass, copper, fibreglass, plastic-lined containers. Do not mix, store or apply spray solutions in galvanised steel or unlined steel (except stainless steel) containers or spray tanks.
Agmate 2,4-D 300 SL Herbicide /glyphosate spray solutions may react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture that can flash or explode if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.
Thoroughly clean all equipment after use either by using hot soapy water or 1% solution of ammonia followed by several clean water rinses or use a commercial tank cleaner.
If using a Sulfonylurea herbicide (chlorsulfuron, metsulfuron), follow decontamination procedures detailed on those product labels.

Compatibility
Agmate 2,4-D 300 SL Herbicide is compatible in tank mixes with glyphosate (450g/L), dicamba (500g/L) chlorsulfuron, metsulfuron, simazine (500g/L), simazine (900g/kg), atrazine (500g/L), atrazine (900g/kg), paraquat/diquat, chlorpyrifos (500g/L), dimethoate, omethoate and phosmet.

Surfactant Addition
DO NOT add surfactant except for Conservation Tillage where the product is to be tank-mixed with a glyphosate product. In this situation always add either a 1000g/L non-ionic surfactant or the acidifying surfactant LI700 in accordance with label directions on the glyphosate product. Use LI700 with glyphosate if insecticides will be included in the tank mixture of if faster brownout of weeds is required.
DO NOT mix with spraying oils, or any other materials or agricultural chemicals except as directed on this label.
DO NOT use LI700 if sulfonylurea herbicides (chlorsulfuron or metsulfuron) are included in the spray mixture.

Tank Mixtures
The Agmate 2,4-D 300 SL Herbicide directions for use on this label are designed to be used as a tank mixture with glyphosate herbicides. However as shown in the compatibility and surfactant addition sections of this label, it is possible to extend/improve weed control to include other foliage applied and/or residual herbicides and adjuvants.
A mixture of Agmate 2,4-D 300 SL Herbicide and glyphosate may be tank mixed with the following herbicides, insecticides and adjuvants where recommended in the Directions for Use tables. Read and follow all label directions, restraints and plant back periods, withholding periods and safety directions for the tank mix products.
Dicamba (500g/L) - For improved control of Sow Thistle. Observe any regional use restrictions.
Chlorsulfuron* - Will provide control for a wide range of broadleaf weeds and grasses.
Metsulfuron - For improved knockdown control of Yellow Burrweed (Amsinckia), Volunteer Chickpeas, Chickweed, Common Sowthistle, Cut-leaf Mignonette, Deadnettle, Faba Beans, Mallee Catchfly, Soursob, Stagger Weed, Wild Garlic. Metsulfuron does not provide residual in-crop weed control.

	Insecticides Chlorpyrifos (500g/L), dimethoate, phosmet and omethoate can be introduced into the tank mix for specific control to prevent insect damage to emerging crops. Mixing Instructions Agmate 2,4-D 300 SL Herbicide mixes readily with water. Ensure the spray tank is free of any residue of previous spray materials. 1. Fill the spray tank with clean water to one half of the required amount and start agitation. Do not use mechanical agitators as these may cause excessive foaming when herbicides are added. 2. Where LI-700 acidifying surfactant is recommended at either 100mL or 300 mL/100L, add to tank through top mesh screen. 3. Add recommended herbicide additive / insecticide to the spray tank and mix thoroughly. 4. Add Agmate 2,4-D 300 SL Herbicide and mix thoroughly. 5. Add the glyphosate product and the remaining water. 6. When non-ionic surfactant is used, add near the end of the filling process to minimise foaming. 7. Always maintain adequate agitation during application and use the tank mix promptly.

Resistance Warning:	GROUP I HERBICIDE Agmate 2,4-D 300 SL Herbicide is a member of the Phenoxys group of herbicides. Agmate 2,4-D 300 SL Herbicide has the Disruptors of plant cell growth mode of action. For weed resistance management Agmate 2,4-D 300 SL Herbicide is a Group I herbicide. Some naturally occurring weed biotypes resistant to Agmate 2,4-D 300 SL Herbicide 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 Agmate 2,4-D 300 SL Herbicide or other Group I herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Agcare Pty Ltd accepts no liability for any losses that may result from the failure of Agmate 2,4-D 300 SL Herbicide to control resistant weeds.

Precautions:	Re-Entry Period If re-entering treated areas before the spray has dried, workers should wear overalls, elbow-length gloves and water-resistant footwear. Clothing must be laundered after each day's use. DO NOT hand harvest sugar cane for at least 1 day after application.

Protections:	PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS DO NOT apply under meteorological conditions or from spraying equipment that may cause spray to drift onto nearby susceptible plants, adjacent crops, crop lands or pastures. Avoid spray drift onto susceptible crops such as cotton, tobacco, tomatoes, flowers, vegetables, vines, fruit trees, legume crops and pastures, oil seed crops or other susceptible crops and trees (e.g. Kurrajongs, Belahs, Eucalypts). PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

Storage and Disposal:	10L, 20L, 200L Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. 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 accordance with relevant local, state or territory government regulations. DO NOT burn empty containers or product. Refillable containers (1000L only) Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage. 110L Mini Bulk Returnable Container Store the original sealed 110L container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. Do not tamper with the MicroMatic valve or the security seal. Do not contaminate the container with water or any other foreign matter. After each use of the product ensure the MicroMatic coupler delivery system and hoses are disconnected, triple rinsed with clean water and drained accordingly. When the contents of the 110L container have been used, please return the empty container to the point of purchase. The 110L container remains the property of Agcare Pty Ltd.

Safety Directions:	Harmful if swallowed. Will damage the eyes. Will irritate the skin. Avoid contact with the eyes and skin. When opening the container and preparing spray or using undiluted concentrate, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length chemical resistant gloves, goggles and half facepiece respirator with organic vapour/gas cartridge or canister. When using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length chemical resistant gloves. If applying by hand wear half facepiece respirator with organic vapour/gas cartridge or canister. 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, goggles, respirator and if rubber wash with detergent and warm water and contaminated clothing.

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

First Aid Warnings:	

GENERAL RESTRAINTS

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.
DO NOT exceed maximum application rate of 15 L/ha (4500 g ae/ha).
DO NOT exceed the maximum daily application rate by backpack spraying of 13.3 L/day (4000 g ae/day).
Additional USAGE restrictions apply in some crops, states and seasons, see restriction Tables 1, 2, 3, 4 and 5.

Table 1. Timing Restrictions for Spraying Peanuts

Situation	Rate L/ha	Region	Timing Restriction
			DO NOT APPLY DURING THE MONTHS
Broadcast Spraying, Prior to sowing (Peanuts)	Up to 2.9 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 3.6 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 3.7 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 7.5 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 to December
		Burdekin	September and October
		Mackay / Whitsunday	August to December
		Mary / Burnett	April to January
		SE Queensland	Use not supported

Table 2. Application and Timing Restrictions for Applications to Pastures

Situation	State	Rate L/ha			
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	11	11	11	11
	New South Wales & ACT	11	11	11	11
	Victoria	1.2	3.5	11	3.5
	Tasmania	1.2	2.6	7.4	3.5
	South Australia	2.4	3.5	11	7.4
	Western Australia	3.5	7.4	11	7.4
Pastures (Established)	**State**	**Summer**	**Autumn**	**Winter**	**Spring**
	Queensland & NT	15	15	15	15
	New South Wales & ACT	15	15	15	15
	Victoria	2	4	15	7.5
	Tasmania	1.4	3.5	11	6.6
	South Australia	3	6.6	11	11
	Western Australia	7.5	10.6	15	11

Table 3. Timing Restrictions for Spraying Sugarcane

Situation	Rate L/ha	Region	Timing Restriction
			DO NOT APPLY DURING THE MONTHS
Sugarcane	Up to 3.6 L/ha	Wet Tropics	No timing restrictions
		Burdekin	No timing restrictions
		Mackay / Whitsunday	October and November
		Mary / Burnett	October and November
		Northern NSW	No timing restrictions
	Up to 7.4 L/ha	Wet Tropics	October to December
		Burdekin	September and October
		Mackay / Whitsunday	August to December
		Mary / Burnett	April to January
		Northern NSW	October and November

Table 4. Application Restrictions for Turf

Situation	State	Rate L/ha
DO NOT apply above maximum rate (L/ha) below OR label rate, whichever is LOWEST		
Turf	Queensland & NT	6.7
	New South Wales & ACT	6.7
	Victoria	5.3
	Tasmania	5.3
	South Australia	5.3
	Western Australia	8.3
If applying to golf courses in Tasmania, DO NOT apply to fairways adjacent to natural water bodies		

Table 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-emergent 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)

SPRAY DRIFT RESTRAINTS

DO NOT apply by 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 1 to 2 hours before sunset and persist until 1 to 2 hours after sunrise.

Boom Sprayer Application

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 (/ha)	**Boom Height above target canopy**	**Mandatory buffer zones** (distances given in metres)				
		Bystander Areas	**Natural Aquatic Areas**	**Pollinator Areas**	**Vegetation Areas**	**Livestock Areas**
Up to 2.9 L (880 g ae/ha)	0.5m or lower	0	20	0	20	0
	1.0m or lower		50		50	
Up to 3.5 L (1080 g ae/ha)	0.5m or lower		25		25	
	1.0m or lower		60		55	
Up to 7.5 L (2250 g ae/ha)	0.5m or lower		40		35	
	1.0m or lower		110		110	
Up to 9.1 L (2750 g ae/ha)	0.5m or lower		45		45	
	1.0m or lower		130		130	

Aircraft Application

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 (/ha)	**Aircraft type**	**Mandatory buffer zones** (distances given in metres)				
		Bystander Areas	**Natural Aquatic Areas**	**Pollinator Areas**	**Vegetation Areas**	**Livestock Areas**
Up to 2.9 L (880 g ae/ha)	Helicopter	0	110	0	110	0
	Fixed Wing		160		150	
Up to 3.5 L (1080 g ae/ha)	Helicopter		130		120	
	Fixed Wing		180		180	
Up to 7.5 L (2250 g ae/ha)	Helicopter		200		200	
	Fixed Wing		325		300	
Up to 9.1 L (2750 g ae/ha)	Helicopter		230		230	
	Fixed Wing		325		300	

DIRECTIONS FOR USE

1. CONSERVATION TILLAGE

Situation & Crop	Weeds Controlled	State	Rate /ha	Critical Comments
Preparatory spray for fallows and seedbeds or prior to sowing the following crops: Balansa clover, Barley, Chickpeas, Cotton, Faba beans, Field peas, Lentils, Linseed, Lucerne, Lupins, Narbon beans, Navy beans, Oats, Perennial ryegrass, Persian clover, Phalaris, Rapeseed, Rice, Safflower, Sorghum, Soybean, Subterranean clover, Sunflower, Triticale, Vetch, Wheat, White clover.	Fumitory (white), Ball Mustard, Indian Hedge Mustard, Common Sowthistle, Turnip Weed, Wild Turnip, Wild Radish	All States	660mL-1.2L + glyphosate (450 g/L) plus surfactant at recommended label rates	RATE SELECTION. Use the lower rate for seedling broadleaf weeds and increase to the higher rate for broadleaf weeds more than 10cm diameter/high. Always add glyphosate (450 g/L) at recommended label rates. At time of application, all weeds must be actively growing and not under stress from low moisture, frost, cold, disease or waterlogging. If grazing has occurred, allow regrowth to 6-8cm before spraying and use higher rate. Always add either a non-ionic surfactant or the acidifying surfactant (LI-700) in accordance with the label directions on the mixture product. Use Li-700 with the mixture if insecticides will be included in the tank mixture or if faster brownout of weeds is required.
	Seedlings of: Australian Bindweed, Bellvine, Caltrop, New Zealand Spinach, Raspweed	NSW, Qld only		
	Ageratum (Blue top), Dock, Volunteer Lupins, Volunteer Peas, Volunteer Sunflowers, Charlock, Fumitory (Red), Medic, Paterson's Curse, Prickly Lettuce (Wild Lettuce), Saffron Thistle, Spear Thistle, Variegated Thistle	All States	900mL–1.2L + glyphosate (450 g/L) plus surfactant at recommended label rates	
	Bathurst Burr, Blackberry Nightshade, Californian Burr, Horehound Seedlings. Lincoln Weed Seedlings, Marshmallow Seedlings, Sorrel Seedlings, Thornapple. Volunteer Vetch, Volunteer Safflower, Common Ice-Plant, Storksbill/Erodium Seedlings, Ivyleaf Speedwell, Melilotus, Shepherd's Purse, Skeleton Weed (Suppression only), Ward's Weed, Wireweed Seedlings (Hogweed), White Clover, Sub-Clover		1.2-1.8L + glyphosate (450 g/L) plus surfactant at recommended label rates	
	Amaranth, Apple of Peru, Mexican Poppy, Annual Ground Cherry, Bladder Ketmia, Fat Hen, Melons, Native Rosella, Noogoora Burr, Potato Weed, Cow Vine, Yellow Vine, Rapeseed	NSW, Qld only	1.8-2.7L + glyphosate (450 g/L) plus surfactant at recommended label rates	
PASTURES: 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	1.1-3.3L	Apply to actively growing young weeds before sowing. Observe plant back periods given in the table in this leaflet.

Situation & Crop	Weeds Controlled	State	Rate /ha	Critical Comments
	Clover, Sorrel		2.3L plus 280-400mL/ha dicamba (500g/L)	Apply to actively growing plants in autumn. Do not sow pasture seed for at least 30 days after application.

2. FIELD CROPS

Situation & Crop	Weeds Controlled	State	Rate /ha	Critical Comments
Wheat Barley Cereal Rye, Triticale	Refer Weed Table	NSW, SA, Vic, Qld, Tas only	675mL – 2.9L Refer to weed table for specific rates in each state	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, SA only). Apply from tillering to boot stage (Vic only). Apply from mid-tillering to before boot stage (Qld only). Apply at 5 leaf to fully tillered (Tas only).
Oats		NSW, SA Vic, Qld only		
Cereals: Wheat, Oats, Barley	Cape Tulip	WA only	1.4-2.6L	Apply from the 5 leaf stage up to jointing stage (Zadoks 15-33) Apply after the 6 leaf stage (Z 16) for Cranbrook, Jacup, Aroona and Spear Wheat and Mortlock Oats to avoid possible damage. DO NOT spray if lucerne is present. WEED STAGE: 10-15cm. Docks should be sprayed before 5 leaf stage. Cape Tulip - low rate for cormils only.
	Dock, Saffron Thistle		2.3L	
	Indian Hedge Mustard, London Rocket, Lupin, Rapistrum, Wild Radish		1.6L	
	Wild Turnip		1.4L	
	Capeweed, Doublegee, Erodium, London Rocket, Lupin, Mustard, Rapistrum, Wild Radish, Wild Turnip		375mL plus 500mL diuron (500g/L)	Apply when crop has 4-5 leaves and most weeds have germinated and are in 2-5 leaf stage. Crop and weeds should be dry at time of application. Some temporary yellowing of crop may occur after application. Undersown sub-clovers may be slightly retarded. DO NOT apply to undersown medics. **Tank Mixtures:** Read and follow all label directions including restraints, spray drift restraints, mandatory no-spray zones, critical comments, withholding periods, regional use restrictions and safety directions for the tank mix products.
Wheat, Barley	Wild Radish	Vic, SA, NSW only	165mL plus 850g/ha methabenz-thiuazuron (700g/kg)	Spray 2-6 weeks after sowing and not later. Do not use on crops undersown with lucerne.
Fallow, Stubble Spray prior to Direct Drilling or Sowing	Refer Weed Table	Vic only	465mL – 2.9L	Observe plant back periods given in the table in this booklet. Can be mixed with chlorsulfuron, paraquat or paraquat/diquat where grasses are present. For skeleton weed, spraying should only be done 6-8 weeks before anticipated sowing date and subsequent cultivation limited to a minimum.
a) Winter Cereals		NSW only	1.2-3.5L	
b) Winter Cereals and Peanuts		Qld only		
Millet		NSW, SA Vic only	1.2-2.3L	Spray when secondary roots have developed, when fully tillered and

Situation & Crop	Weeds Controlled	State	Rate /ha	Critical Comments
		Qld only	1.2-1.8L	before heads start to form at the base of the tillers. Do not use on Panorama or Panicum.
Saccaline, Broom Millet, Millet	Cape Tulip, Dock, Saffron Thistle, Indian Hedge Mustard, London Rocket, Lupin, Rapistrum, Radish, Wild Turnip	WA only	2.3L	Spray when crop is 10 - 30 cm high and secondary roots have developed and before tasselling. Apply as direct spray to weeds
Sugarcane	Bindy Eye (Star Burr), Blue Top, Cobblers Pegs, Fleabanes, Jute, Leucas, Needle Burr, Spear Thistle, Water Primrose, Ipomea Vines, Convolvulus Vines	Qld only	3.6-7.3L	Add 60-120mL of 1000 g/L non-ionic wetter to 100L of spray mixture. Agitate well. DO NOT use on Q63, Q67, Q80 or Q96 varieties.
	Chinese Mint, Blue Snakeweed		7.3L	
Peanuts	Broadleaf Weeds except Noogoora Burr, Grasses except Mossman Burr	Qld only	3.6L or 7.5L	LOWER RATE: Apply as a BAND SPRAY as soon as possible after planting in a 55 cm band. 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.
Harvest Aid or Salvage Spray - Winter Cereals	Desiccate Broadleaf Weeds	All States only	2.5–3.4L	Apply after dough stage

3. PASTURES, NON AGRICULTURAL, RIGHTS OF WAY, INDUSTRIAL LAWNS

Situation & Crop	Weeds Controlled	State	Rate - /ha	Critical Comments
Pastures & Non Agricultural	Refer Weed Table	NSW, Qld, SA, Tas only	1.1–3.5L	Pasture legumes including lucerne, clovers and medics may be damaged unless well protected by grasses. Spot spraying is preferred
	Amsinckia, Docks, Bindweed, Caltrop, Flatweed, Spear Thistle, Capeweed, Doublegee, Saffron Thistle, Mustard, Wild Radish, Wild Turnip, Annual Thistles, Paterson's Curse	WA only	2.3L	For pastures not containing legumes. Only seedling Docks, Spear Thistle and Saffron Thistle will be controlled.
	Afghan Melons		3.3L + 1% crop oil	Spray when plants are actively young preferably before flowering or vining.
	Paddy Melons		1.6 – 2.3L	
	Prickly Saltwort (Roly Poly)		3.3L	Spray when plants are small
	Stinkwort		3.3 – 6.6L plus surfactant	Best results are obtained when plants are small. Use high rate on larger plants
	Dove weed		6.6L	Spray after good emergence of seedlings.
Pastures, Rights of Way & Industrial	Boxthorn, Boneseed, Hawthorn	Vic, SA only	165mL/10L water	Spot spraying. For Boneseed only, thoroughly wet plants or seedlings.
	Groundsel		2.0L/15L water	MISTING: Lightly wet plants

Situation & Crop	Weeds Controlled	State	Rate - /ha	Critical Comments
		NSW, Qld, SA Only	600mL/100L water	HIGH VOLUME: Thoroughly wet plants.
			500mL/15L water	CUT STUMP: Swab the cut stump within one hour of cutting. Apply by a pouring can or knapsack spray.
			6.0-9.1L	AERIAL APPLICATION: Spray when Groundsel is actively growing.
	Lantana		600mL/100L water	Use a 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 the 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	825mL/100L water	Hand gun and Knapsack only. A thorough coverage of leaves and plantlets is necessary. Use 1000 g/L non-ionic wetter at the rate of 1.0mL of surfactant per 1L of mixture.
	Noogoora Burr, Weir Vine (Ipomea)	Qld only	330mL/100L water	In all cases apply to young, actively growing weeds, ensuring thorough coverage. * Spray rosette stage. # Repeat spraying if necessary.
	Annual & Perennial Pigweed, Artichoke Thistle, Bathurst Burr, Billygoat Weed, Blue Snake Weed, Burr Medic, Clockweed*, Fleabane, Galvanised Burr, Hemlock, Hoary Cress, #Kyalinga Weed (Whisker Grass), Knobweed, Milky Cotton Bushes, Parthenium Weed, Paterson's Curse. Saffron Thistle, Star Burr, Thornapple, Variegated Thistle*.		600mL/100L water	
	Rubber Vine		330mL/10L water	Apply to freshly cut stump.
Pastures - Spray/Graze Techniques				**PRECAUTION.** An increased quantity of poisonous plants may be eaten by stock using Spray-Graze e.g. 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.
	Amsinckia, Thistles, Capeweed, Doublegee, Mustard, Paterson's Curse, Wild Turnip, Wild Radish, Docks, Geranium, Erodium	SA only	1.1L	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

Situation & Crop	Weeds Controlled	State	Rate - /ha	Critical Comments
	Annual Thistles, Capeweed, Doublegee, Mustards, Paterson's Curse, Turnip, Saffron Thistle, Spear Thistle	Tas, Vic only		until pasture shows signs of over grazing. The return to normal stocking levels. Use high stocking rates following spring to prevent weeds from flowering. Repeat treatments may be required for 2-3 years for complete control.
	Amsinckia, Docks (seedlings only), Capeweed, Doublegee, Mustard, Wild Radish, Wild Turnip, Paterson's Curse, Annual Thistles	WA only	1.3L	
	Spear Thistle, Saffron Thistle		2.5L	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		3.3L	Heavy stocking on young plants sprayed with 750mL/ha provides effective control.
	Docks	Vic only	2.3L	Apply in September only and follow other recommendations above
	Caltrop, Capeweed, Charlock, Mustards, Paterson's Curse, Shepherd's Purse, Saffron, Slender, Spear or Variegated Thistle, Turnip Weed, Wild Radish, Wild Turnip	NSW only	600mL-2.3L	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 short before spraying. Other legumes may be affected.
Lawns	Refer Weed Table	WA & Qld only	3.4-6.8mL/1L water	Wet foliage thoroughly

4. SPOT SPRAYING

Situation & Crop	Weeds Controlled	State	Mixing Rate / Critical Comments
High Volume Spraying	Refer To Weed Table	All States	Add 1/10th of rate in weed table to 150 litres of water. Each 150 litres of mix will cover 1000m^2 (1/10th ha) e.g. If rate in weed table is 1.5L use 150mL/150L water.
Knapsack Application			Add 1/100th of rate in weed table to 10 litres of water. Each 10 litres of mix will cover 100m^2 (1/100th/ha) e.g. If rate in weed table is 1.5L use 15mL/10L water.

WEED TABLE

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.

NOTE: Where weeds are to be sprayed in a CROP or PASTURE, use only the rate given for the particular crop or situation indicated under the Directions for Use table.

Weed Table:

Weeds	Application Rate per Hectare							Critical Comments
	Crop						Pastures	
	Vic	NSW	SA	Qld	Tas	WA	NSW, SA, Qld, Tas only	
Amaranthus spp.	-	1.1-2.3L	-	1.8L	-	-	-	Spray young plants
Apple of Peru	-	1.1-2.3L	-	1.8L	-	-	-	Spray young plants. Susceptible when young
Bathurst Burr	-	1.6-2.3L		1.8L	-	-	1.6–2.3L not SA	Spray seedlings only
Blackberry Nightshade	-	1.1-2.3L	-	1.8L	-	-	-	
California Burr	-	1.6L–2.3L	-	1.8L	-	-	1.6–2.3L not SA	Spray seedlings only
Cape Tulip	-	-	-	-	-	1.40–2.6L		Low rate for cormils only*
Capeweed	2.9L		3.5L	-	2.9L	-	3.4-5.8L	Spray seedlings to rosette stage
Caltrop	-	1.6-3.5L	-	1.8L	-	-	-	Moderately susceptible
Charlock	1.1-1.6L	1.1L-2.3L	1.1L	-	2.9L	-	1.6– 2.3L	Spray at rosette stage
Clover	-	2.5L	-	-	-	-	-	
Common Ice Plant	-	-	2.3L	-	-	-	-	
Docks	2.9L	-	2.9L	2.9L	2.9L	2.3L	6.6L SA only	Spray at multiple leaf stage - effective only on seedlings.
Fat Hen	-	1.2L-3.5L	-	1.8L	2.9L	-	-	Spray pre-flowering
Fumitory - red	-	-	3.5L	-	-	-	-	
Fumitory - white	1.6L	-	1.1L	-	-	-	-	Spray at multiple leaf stage
Hexham Scent or Melilotus	2.9L	-	2.3L	2.9L	-	-	2.3-3.4L	Spray at multiple leaf stage, before seeding.
Hoary Cress	1.8–2.9L	2.3-3.4L	2.9L	2.9L	-	-	3.0-3.4L	Spray rosette and pre-flowering
Hogweed/ Wireweed	2.9L	-	-	2.9L	-	-	-	Spray at multiple leaf stage (Vic). Spray at seedling and young plant stage (Qld)
Horehound	-	-	2.9L	-	-		4.6-6.6L SA only	Spray seedlings
Khaki Weed	-	-	-	-	-	-	2.3-4.5L not SA	Spray seedlings only
Lincoln Weed			3.4L					Spray early rosettes
London Rocket	-	-	-	-	-	1.6L	-	
Lupins	-	1.6-3.4L	-	-	-	-	-	
Mexican Poppy	-	-	-	2.9L	-	-	-	Spray seedlings - plants become more resistant with age
Mintweed	-	2.3L	-	1.8L	-	-	-	Spray seedlings - resistant in later stages
Mustards	465mL-1.1L	1.1-2.3L	1.1-2.9L	1.8L	-	1.6L	1.1-2.3L	Spray at 2-4 leaf up to rosette stage

Weeds	Application Rate per Hectare							Critical Comments
	Crop						Pastures	
	Vic	NSW	SA	Qld	Tas	WA	NSW, SA, Qld, Tas only	
New Zealand Spinach	-	2.3-3.4L	-	-	-	-	-	
Noogoora Burr	-	1.6L-2.3L	-	1.8L	-	-	1.6-2.3L not SA	Spray seedlings only
Paterson's Curse	-	2.3-3.4L	-	2.9L	-	2.6L	3.4-4.6L	Spray rosettes or before plants have 10 leaves. Later stages harder to kill
Potato Weed	-	1.1-2.3L	-	1.8L	-	-	-	
Rapeseed	-	1.6L-3.4L	-	-	-	-	-	
Rough Poppy	-	2.3L	-	-	-	-		
Safflower	-	1.1-2.8L	-	-	-	-	-	
Shepherds Purse	-	2.3-3.4L	-	-	2.9L		1.6L-2.3L	Spray young rosettes
Skeleton Weed	2.9L	2.3-3.4L	2.9L				3.0-4.6L	Spray rosettes before aerial growth commences.
Sorrel	2.9L	3.4L	2.9L	-	-	-	-	Only moderately susceptible
Speedwell - Ivy leaf	-	-	2.3L	-	-	-	-	
Spiny Emex	-	-	-	2.9L	-	-	-	Only young plants are susceptible
Stinkwort	-	1.6mL-2.8L	-	-	-	-	-	
Storksbill/Erodium	-	-	-	-	2.9L	-	3.3-6.6L	Spray seedlings to young rosettes
Sunflower (seedlings)	2.9L	1.1-2.8L	-	1.8L	-	-	-	
Thistles - Californian	-	-	-	-	1.2L	-	6.6-7.7L	Repeated applications may be necessary (NSW, Tas only)
- Saffron	2.3L	1.1-2.8L	2.9L	2.9L	2.0L	2.3L	2.3-3.4L	Low rate only sufficient to control weeds in crops at rosette stage when sprayed early.
- Slender/Shore	-	1.6-2.8L	-	-	2.9L	-	2.3L	Suppression only
- Soldier	2.9L	-	-	-	-	-	2.3-3.3L not NSW, TAs	Spray young rosettes
- Spear	1.1L	-	-	-	2.9L	-	2.3-3.3L	Spray young rosettes
- Star	-	-	-	-	-	-	3.3-6.6L SA only	Use higher rate as flower stalks appears
- Variegated	-	1.1-3.5L	-	1.8L	2.9L	-	2.3-3.4L	Spray at rosette stage
Thornapple	-	1.6-2.3L	-	-	-	-	3.3-5.0L not SA	Spray seedlings only
Turnip Weed / Rapistrum	-	1.1-2.3L	-	1.1L	-	1.6L	1.1-2.3L	
Vetches/Tares	2.9L	-	2.3L	-	-	-	-	Spray at multiple leaf stage
Wards Weed	-	-	2.3L	-	-	-	-	
Wild Cabbage	2.9L	-	-	-	-	-	-	Spray multiple leaves
Wild Poppy	1.1L	-	-	-	-	-	2.3 – 3.4L	Spray rosettes

Weeds	Application Rate per Hectare							Critical Comments
	Crop						Pastures	
	Vic	NSW	SA	Qld	Tas	WA	NSW, SA, Qld, Tas only	
Wild Radish	2.9L	3.5L	2.9L	1.8L	2.9L	1.6L	1.6 –2.3L	Spray up to young rosette stage
Wild Turnip	465mL – 1.1L	1.1 – 2.3 L	660mL	-	2.9L	1.4L	1.1 – 2.3L	Spray 2-4 leaf up to rosette stage

Plant Back Days for Agmate 2,4-D 300 SL Herbicide

Plant Back Days for Agmate 2,4-D 300 SL Herbicide			
Crop Rates:	Up to 1.17 L/ha	Up to 2.4 L/ha	Up to 3.53 L/ha
Balansa Clover	7	7	10
Barley %	1	1	3
Chickpeas #	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 +	7	14	21
Medic	7	7	10
Narbon Beans	7	7	10
Navybean	10	10	14
Oats	3	3	7
Perennial	7	7	10
Persian Clover	7	7	10
Phalaris	7	7	10
Canola/Rapeseed	14	21	28
Rice	7	7	14
Safflower #	7	14	21
Sorghum @	3	7	10
Soybean	14	14	21
Sub-Clover	7	7	10
Sunflower @	7	10	14
Triticale %	1	3	7
Vetch	7	7	10
Wheat %	1	3	7
White Clover	7	7	10

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

Notes:

% In Queensland, no rainfall is required to fall prior to commencement of Plant Back Period for Wheat, Barley and Triticale.

In Queensland, planting of Canola/Rapeseed, Chickpeas and Safflower must be delayed for at least 14 days following rainfall of at least 15 mm.

@ In Central Queensland and when using 1.67 L/ha or less of Agmate 2,4-D 300 SL Herbicide, the plant back period for Sorghum and Sunflower is 1 day irrespective of rainfall.

\+ In WA the plant back period for Lupins at all rates is 28 days.