

Product Name: eLabel  
APVMA Approval No:

SUREFIRE WEEDPRO BIOAQUA 360 HERBICIDE  
82251/109582



Label Name:	SUREFIRE WEEDPRO BIOAQUA 360 HERBICIDE
Signal Headings:	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Constituent Statements:	360 g/L GLYPHOSATE PRESENT AS THE ISOPROPYLAMINE SALT
Mode of Action:	GROUP <b>M</b> HERBICIDE
Statement of Claims:	A non-selective herbicide for the control of a broad range of annual, perennial and aquatic weeds as indicated in the Directions for Use.
Net Contents:	1000L 110L 200L 20L 5L 1L
Restrains:	DO NOT disturb weeds by cultivation, sowing or grazing for 1 day after treatment of annual weeds and 7 days after treatment for perennial weeds. DO NOT treat weeds under poor growing conditions or dormant conditions as occur in drought, waterlogging, disease, insect damage or following frost. Reduced control may also occur when treating weeds heavily covered with dust or silt. Rainfall occurring up to 6 hours after application may reduce effectiveness. Heavy rainfall within 2 hours of application may wash the chemical off the foliage and a repeat treatment may be required.
Directions for Use:	

Other Limitations:	
Withholding Periods:	WITHHOLDING PERIOD: NOT REQUIRED WHEN USED AS DIRECTED.
Trade Advice:	
General Instructions:	
Resistance Warning:	<p><b>GROUP M HERBICIDE</b></p> <p>Surefire WeedPro Bioaqua 360 Herbicide is a member of the Glycines group of herbicides. Surefire WeedPro Bioaqua 360 Herbicide has the inhibition of EPSP synthase mode of action. For weed resistance management Surefire WeedPro Bioaqua 360 Herbicide is a Group M herbicide. Some naturally occurring weed biotypes resistant to Surefire WeedPro Bioaqua 360 Herbicide and other Group M 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 Surefire WeedPro Bioaqua 360 Herbicide or other Group M herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, PCT Holdings Pty Ltd accepts no liability for any losses that may result from the failure of Surefire WeedPro Bioaqua 360 Herbicide to control resistant weeds.</p>
Precautions:	
Protections:	<p><b>PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS:</b> DO NOT apply under meteorological conditions or from spraying equipment that could be expected to cause spray drift onto nearby susceptible plants, adjacent crops, crop lands or pastures. Avoid contact with foliage, green stems or fruit of crops, desirable plants and trees, since severe injury or destruction may result.</p> <p><b>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT:</b> DO NOT contaminate dams, rivers or streams with the product or used container. When controlling weeds near water, refer to label directions to minimise the entry of spray into the water.</p> <p><b>PROTECTION OF LIVESTOCK</b> There is no withholding period for grazing stock, but to give the product sufficient chance to be efficiently absorbed by sprayed vegetation, it is recommended that livestock be kept clear of treated annual weeds for one day after spraying and for perennial weeds 7 days. For certain weeds known to be toxic to stock, it is advisable to keep livestock away until complete browning occurs.</p>
Storage and Disposal:	Do not store the product in galvanised steel or unlined steel containers, as the product may react to produce hydrogen gas, which in turn could form a highly combustible gas that could explode if ignited by an open flame, spark, lit cigarette etc. Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush and puncture containers and deliver empty packaging for appropriate disposal 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.

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

**Safety Directions:**

Product will irritate the eyes and skin. Avoid contact with eyes and skin. When preparing product for use, wear elbow-length PVC gloves and face shield or goggles. When using controlled droplet applicator wear protective waterproof clothing and impervious footwear. 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 and face shield or goggles and contaminated clothing.

**First Aid Instructions:**

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126.

**First Aid Warnings:**

## ANNUAL WEEDS CONTROL (All States)

WEEDS CONTROLLED	RATE	CRITICAL COMMENTS
<p>Amaranth (<i>Amaranthus</i> spp.)            Barley grass (<i>Hordeum leporinum</i>)            Barnyard grass (<i>Echinochloa</i> spp.)            Brome grass (<i>Bromus</i> spp.)            Caltrop (<i>Tribulus terrestris</i>)            Canary grass (Annual phalaris) (<i>Phalaris</i> spp.)            Capeweed (<i>Arctotheca calendula</i>)            Cereals (Volunteer wheat, barley, oats, sorghum)            Chickweed (<i>Stellaria media</i>)            Cobbler's pegs (<i>Bidens pilosa</i>)            Deadnettle (<i>Lamium amplexicaule</i>)            Doublegee (<i>Emex australis</i>)            Fumitory (<i>Fumaria officinalis</i>)            Ground cherry (<i>Physalis angulata</i>)            Lesser Swinecress (<i>Coronopus didymus</i>)            Liverseed grass (<i>Urochloa panicoides</i>)            Mintweed (<i>Salvia reflexa</i>)            Paradoxa grass (<i>Phalaris paradoxa</i>)            Paterson's curse (<i>Echium plantagineum</i>)            Pigweed (<i>Portulaca oleracea</i>)            Potato weed (<i>Galinsoga parviflora</i>)            Ryegrass (<i>Lolium rigidum</i>)            Saffron thistle (<i>Carthamus lanatus</i>)            Spear thistle (<i>Cirsium vulgare</i>)            Spiny Burrgrass (<i>Cenchrus</i> spp.)            Spurge (<i>Euphorbia</i> spp.)            Sub clover (<i>Trifolium subterraneum</i>)            Thornapple (<i>Datura</i> spp.)            Variegated thistle (<i>Silybum marianum</i>)            Wild mustard (<i>Sisymbrium officinale</i>)            Wild oats (<i>Avena</i> spp.)            Wild turnip (<i>Brassica tournefortii</i>)            Winter grass (<i>Poa annua</i>)</p>	<p><b>Boom</b> 2-3 L/ha</p> <p><b>Handgun</b> 500-700 mL/100 L</p> <p><b>Knapsack</b> 75-100 mL/15 L</p> <p><b>Wiper equipment and controlled droplet applications:</b> See Application section</p>	<p>All weeds: spray actively growing plants. The taller the weed the higher the rate. As a guide use the higher rate when weeds are higher than 15 cm.</p> <p>If residual activity is required, see section titled "Compatibility". To use a residual herbicide, use the herbicides that have been recommended as being compatible in accordance with their label rates.</p> <p>Use this product at rates indicated in the adjacent column.</p>

## PERENNIAL WEEDS

WEEDS CONTROLLED	Rate			CRITICAL COMMENTS
	Boom L/ha	Knapsack mL/15 L	Handgun vol/100 L	
Bamboo ( <i>Bambusa</i> spp.)	-	150 L	1 L	Apply to actively growing foliage and/or re-growth, which is between 1 m and 2 m tall. Cut stump: Dilute to 1:6 i.e. mix 1 part product plus 6 parts water. Cut stems back to 20 cm high, pour mixture into hollow stem or wet the cut.
Bent grass ( <i>Agrostis capillaris</i> )	2.5 L	75 mL	500 mL	Apply to actively growing plants in late spring when they have some seed head development but before summer drought stress. Bent grass should NOT be heavily grazed at spraying. Follow up management is required to limit seedling re-establishment. Full disturbance with a tyned implement should follow 10-21 days after spraying. Application of this product should be followed by a summer crop and/or by re-seeding pasture or crop the following autumn.
Blady grass ( <i>Imperata cylindrica</i> )	9 L	200 mL	1.3 L	Spray at head stage while plants are in active growth stage.
Bracken ( <i>Pteridium esculentum</i> )	9 L	225 mL	1.5 L	For boom application always add an organosilicone penetrant, (200 mL per 100 L spray) otherwise reduced results will occur. Addition of an organosilicone penetrant (200 mL/100 L spray) may improve control with handgun application. Wiper application is recommended (see <b>Wiper equipment</b> ). Double pass application is required for PickWick equipment. Bracken should be slashed in Winter/Spring prior to treatment. Apply this product in March/May to fully unfurled, actively growing fronds but prior to frosts. Visible symptoms may not be fully apparent until the next season. Complete control will not be achieved from one application. Repeat treatment is recommended, preferably associated with pasture improvement.
Carpet grass ( <i>Axonopus</i> spp.)	3 L	75 mL	500 mL	Spray at early head stage while in active growth stage.
Cocksfoot ( <i>Dactylis glomerata</i> )	3 L	100 mL	700 mL	Spray at early head stage while in active growth stage.
Couch ( <i>Cynodon dactylon</i> )	9 L	200 mL	1.3 L	Spray at early head stage (late Spring).
Flatweed (Cats Ear) ( <i>Hypochaeris radicata</i> )	3 L	100 mL	700 mL	Spray at early flowering stage to fully developed rosettes.
Glyceria ( <i>Glyceria maxima</i> )	6 L	150 mL	1 L	Apply to actively growing plants at mature head stage in late summer/autumn. Add a non-ionic surfactant (50-60% a.i.) at 200-250 mL/100 L. NOTE: Control of Glyceria is only allowable in dry drains and channels and margins of dams, lakes and streams. DO NOT apply to weeds growing in or over water. DO NOT spray across open bodies of water, and DO NOT allow spray to enter water. DO NOT allow water to return to dry channels within 4 days of application.

continued

WEEDS CONTROLLED	Rate			CRITICAL COMMENTS
	Boom L/ha	Knapsack mL/15 L	Handgun vol/100 L	
Guinea grass ( <i>Panicum maximum</i> )	9 L	200 mL	1.3 L	Spray at early head stage. Refer to Application Equipment section of the label: sub-heading Wiper Equipment as it can also be used.
Hoary cress ( <i>Cardaria draba</i> )	1.5 L	75 mL	500 mL	Spray at late rosette to flowering stage, late July to September. At this time of year ensure frosts, waterlogging or possibly drought stress are not a restraint as plants need to be in active growth stage. Refer to Wiper Equipment section of this booklet if this use technique can be applied to the situation.
Johnson grass ( <i>Sorghum halepense</i> ) Kangaroo grass ( <i>Themeda australis</i> ) Kikuyu ( <i>Pennisetum clandestinum</i> )	6 L	150 mL	1 L	Spray at early head stage when plants are actively growing or refer to Wiper Equipment section of this booklet if that application technique is to be used on Johnson Grass.
Lovegrass, African ( <i>Eragrostis curvula</i> )	6 L	150 mL	1 L	Apply to actively growing plants. Retreatment and/or pasture improvement is recommended to restrict seedling re-establishment.
<i>Ludwigia peruviana</i>	-	150 mL	1 L	Apply when actively growing and at or beyond the early bloom stage of growth, but before autumn colour changes occur. Thorough coverage is essential for best control.
Nutgrass ( <i>Cyperus rotundus</i> )	6 L	150 mL	1 L	<b>Non-cultivated situations:</b> Apply to actively growing plants in late summer-autumn (February-April) when at least 20% have reached the head stage.
Does not refer to other <i>Cyperus</i> species which may be locally known as nutgrass.	3 L plus 3L	100 mL plus 100 mL	700 mL plus 700 mL	If spraying is to be done on crop growing land, apply first spray in February which is about the time that 20-25% of plants have reached the heading stage. Then a second application is necessary about 2 months later which gives adequate time for full emergence to occur. Because underground runners are broken up by cultivation, individual nuts may spring up and repeat treatments may be needed to obtain a total control situation. On land that is primarily grazing or urban, spray in Feb/April period, so long as correct growing conditions are present. Again ensure that 20-50% of plants have reached the head stage.
Pampas grass ( <i>Cortaderia</i> spp.)	-	150-195 mL	1-1.3 L	Apply to actively growing plants during Spring, Summer or Autumn. Ensure complete coverage of the foliage. For best results apply after flowering. For easier access, large plants may be cut or burnt prior to spraying, but first allow regrowth to reach 1 m. Use the higher rate on plants over 1 m high. Low Volume Applications: Use 1:9 (10%) mixture of product:water. Apply 2 x 2 mL per 0.5 m height. Ensure spray contacts all foliage.

continued

WEEDS CONTROLLED	Rate			CRITICAL COMMENTS
	Boom L/ha	Knapsack mL/15 L	Handgun vol/100 L	
Paragrass ( <i>Brachiara mutica</i> )	9 L	195 mL	1.3 L	Apply to actively growing plants at the early head stage.
Paspalum ( <i>Paspalum dilatatum</i> )	6 L	150 mL	1 L	Spray at early head stage when plants are in active growth.
Pellitory ( <i>Parietaria judaica</i> )	-	150 mL	1 L	Apply to actively growing plants prior to seeding. Repeat applications may be necessary to control seedlings and/or regrowth.
Phalaris ( <i>Phalaris aquatica</i> )	3-6 L	75-150 mL	500 mL-1 L	For medium to longer term control, use the high rates while plants are in active growth phase during Winter/Spring. The lower rates may be used in conjunction with burning (fire breaks). This will leave a brown out and better burning conditions. Leave for 2-3 weeks after spraying before burning.
Plantains ( <i>Plantago</i> spp.)	3 L	100 mL	700 mL	Spray when plants have reached the early head stage. Bear in mind that plantains are slow to develop toxicity symptoms.
Prairie grass ( <i>Bromus unioloides</i> ) Qld blue grass ( <i>Dichanthium sericeum</i> ) Red-leg grass ( <i>Bothriochloa macra</i> ) Rhodes grass ( <i>Chloris gayana</i> )	6 L	150 mL	1 L	Spray at early head stage of heading while plants are in active growth phase.
Rope Twitch ( <i>Agropyron repens</i> )	6 L	150 mL	1 L	Leave ground in a dormant state for 8 months prior to spraying in late Summer/Autumn, so that the foliage to uptake the product is fully available (at least 20 cm in height). Ensure drought stress conditions do not exist at time of spraying.

continued

WEEDS CONTROLLED	Rate			CRITICAL COMMENTS
	Boom L/ha	Knapsack mL/15 L	Handgun vol/100 L	
Silverleaf Nightshade ( <i>Solanum elaeagnifolium</i> )	-	300 mL	2 L	Spray actively growing plants when good soil moisture is present. Spray when plants are in the late flowering to berry stage. Follow up sprays will be required to maximise control.
Sorrel ( <i>Rumex acetosella</i> )	6 L	150 mL	1 L	Spray at bud stage so long as plants are in an active growth phase. See also Conservation Tillage section.
Soursob ( <i>Oxalis pes-caprae</i> )	1.5 L	75 mL	500 mL	Best results can be obtained by late Winter/early Spring sprays. Ensure that foliage is in a healthy, actively growing stage at time of spraying. See also Conservation Tillage section.
St John's Wort ( <i>Hypericum perforatum</i> )	3 L	75 mL	500 mL	Spray at the flowering to post-flowering stage in the Summer/Autumn period. As spraying is only part of the total management concept of pasture improvement, follow-up sprays may be needed.
Thistle, Artichoke ( <i>Cynara cardunculus</i> )	3 L	75 mL	500 mL	Spray when plants have reached rosette/early heading stage. Plant should be free of soil deposits, particularly when spraying along roadsides.
Thistle, Californian ( <i>Cirsium arvense</i> )	6 L	150 mL	1 L	Spray at the flowering stage. As spraying is only part of the total management concept of pasture improvement, follow-up sprays may be needed.
Yorkshire fog ( <i>Holcus lanatus</i> )	3 L	100 mL	700 mL	Spray when plants have reached the early heading stage and are in an active growth phase.



## BRUSH AND WOODY WEEDS

WEEDS CONTROLLED	RATE		CRITICAL COMMENTS
	Handgun/ knapsack Vol/1 L	Low volume Surefire WeedPro Bioaqua 360 Herbicide : Water	
Bitou Brush / Boneseed ( <i>Chrysanthemoides monilifera</i> )	5 or 10 mL	1:29 or 1:19	Apply to actively growing plants. Do not treat plants which are stressed, particularly drought stressed. Spray to wet all foliage. Best results achieved when treated during winter at peak flowering. Use the higher rate on bushes over 1.5 m. Follow-up treatment may be required to prevent re-establishment. Low Volume Applications (gas gun and splatter gun): ensure spray contacts all foliage. Use the higher rate (1:19L) on bushes over 1.5 m high.
Blackberry ( <i>Rubus fruticosus L. agg</i> )	10-13 mL	-	Apply from flowering to leaf fall (generally Jan-May). Spray plants which are not under stress due to high temperatures, drought or frost. Spray thoroughly to wet all foliage. Use the higher rate for dense old stands over 2 m high. Further treatment may be needed to control seedlings and regrowth. Symptoms may be slow to appear and may not be apparent until next season. Burning (after complete brownout), pasture improvement and/or further treatment are recommended to control seedlings and/or regrowth. Use of CDA equipment is not recommended. In Tasmania, do not treat bushes bearing mature fruit.
Boxthorn, African ( <i>Lycium ferocissimum</i> )	7-10 mL	-	Spray to wet all foliage. Use the lower rate for young bushes and the higher rate for bigger bushes. DO NOT spray if conditions are hot and dry. Burning (after complete brownout), pasture improvement and/or further treatment are recommended to control seedlings and/or regrowth. Use of CDA equipment is not recommended.
Gorse (Furze) ( <i>Ulex europaeus</i> )	10 mL plus organosilicone penetrant 2 mL	-	May be applied at any time of year but plants must be actively growing. Always add an organosilicone penetrant to ensure good results. Spray to wet all foliage. Burning (after complete brownout), pasture improvement and/or further treatment is recommended to control seeding and/or regrowth.
Groundsel Bush ( <i>Baccharis halimifolia</i> )	7-10 mL	1:9	Apply to actively growing plants using the higher rate on bushes over 2 m tall. Do not apply during Summer drought stress conditions or in Winter. Spray to wet all foliage. Further treatment and/or pasture improvements are recommended to control seedlings and/or regrowth. Low Volume Application (e.g. splatter gun and gas gun): Use 1:9 (10%) mixture of product: water. Apply 2 x 2 mL dose per 0.5 m bush height. Ensure spray contacts all foliage. Use of CDA equipment is not recommended.
Hawthorn ( <i>Crataegus spp.</i> )	10-13 mL	1:9	Spray from flowering to leaf fall when plants are actively growing. Use the higher rate for plants over 2 m high. Spray to thoroughly wet all foliage. Burning (after complete brownout), pasture improvement and/or further retreatment is recommended to control seeding and regrowth. Low Volume (e.g. splatter gun and gas gun): Use 1:9 (10%) mixture of product:water. Apply 2 x 5 mL dose per 0.5 m bush height. Ensure spray contacts all foliage.
Lantana ( <i>Lantana camara</i> )	10 mL	1:9	Apply to actively growing plants with full foliage which are actively growing. Spray to thoroughly wet all foliage and individual plants. Do not spray during periods of summer drought stress. Burning (after complete brownout), pasture improvement and/or further treatment are recommended to control seedlings and/or regrowth. The addition of an organosilicone penetrant (200 mL/100 L) may improve control. <b>Low volume application</b> (e.g. Splatter gun and Gas gun): Apply 2 x 2 mL dose/0.5 m bush height. Ensure spray contacts all foliage.

			<b>Sprinkler sprayer:</b> Apply 6 mL of a 1:9 (10%) solution to every square metre of treated area. Use of CDA equipment is not recommended.
Mistflower ( <i>Eupatorium riparium</i> )	5 mL	1:9	Apply to plants with full foliage which are actively growing. Spray to thoroughly wet all foliage. Further treatment and/or pasture improvement are recommended to restrict seedling re-establishment. <b>Sprinkler sprayer:</b> Apply 3 mL at 1:9 (10%) solution to every square metre of treated area.
Sifton Bush/Chinese Scrub ( <i>Cassina arcuata</i> )	10 or 13 mL	1:9	Apply to actively growing plants ensuring complete coverage. Further treatment and/or pasture improvement are recommended to restrict seedling re-establishment and/or regrowth. For High Volume Application: Use the higher rate on bushes over 1 m. Wiper Application: Double pass application is required. Best results are achieved if bushes are less than 1 m tall and are green at time of application. Low Volume Application: Apply 40 mL per 0.5 m height.
Sweet Briar ( <i>Rosa rubiginosa</i> )	15-20 mL	1:9	Apply from late flowering to leaf fall to actively growing plants. Spray to thoroughly wet all foliage. Use the higher rate on bushes over 1.5 m high. Burning (after complete brownout), pasture improvement and/or further retreatment is recommended to control seeding and regrowth. Low Volume (e.g. splatter gun and gas gun): Apply 2 x 5 mL dose per 0.5 m bush height. Ensure spray contacts all foliage.

## UNWANTED TREES

### RESTRAINTS:

DO NOT apply to trees under stress or to trees that are not actively growing.

METHOD	SPECIES CONTROLLED	TREE SIZE	MIXTURE Product : water	CRITICAL COMMENTS
<b>Stem Injection</b>	Flooded Gum ( <i>Eucalyptus grandis</i> ), Ghost Gum ( <i>E. papuana</i> ), Gum Topped Bloodwood ( <i>E. dichromophloia</i> ), Messmate Stringybark ( <i>E. obliqua</i> ), Narrowleaf Ironbark ( <i>E. crebra</i> ), Poplar Box ( <i>E. populnea</i> ), Privet ( <i>Ligustrum</i> spp.), Rhus ( <i>Toxicodendron succedaneum</i> ), Silverleaf Ironbark ( <i>E. melanophloia</i> ), Swamp Mahogany ( <i>Tristania suaveolens</i> ), White Mahogany ( <i>E. acmenoides</i> ), Willows ( <i>Salix babylonica</i> )	basal diameter to 25 cm	Undiluted 1 mL/cut	Use a specially calibrated applicator which can deliver 1 or 2 mL. Make a cut at an oblique angle about 5 cm deep. Ensure cut penetrates the bark to the sap stream and that this product is injected as soon as possible after the cut has been made. Cuts should be 13 cm apart around the tree below any branching. Remove or treat branches below the cut.  For multi-stemmed trees, treat each stem as an individual tree.
		basal diameter 25-60 cm	Undiluted 2 mL/cut	
		Basal diameter to 25 cm	Mixture 1:1. Apply 2 mL/cut.	
		Basal diameter 25-60 cm	Undiluted 2 mL/cut.	
<b>Foliar Application Low Volume (Gas gun or Splatter gun)</b>	Bullich ( <i>Eucalyptus megacarpa</i> ), Marri ( <i>E. calophylla</i> ), Jarrah ( <i>E. marginata</i> )	0-1.5 m height	1:15 Add an organosilicone penetrant at 20 mL/10 L spray mixture.	Dilute this product with water in the recommended ratio. Calibrate splatter gun to apply 5 mL of product per dose, as a fine spray. Apply 5 mL per 0.5 m of tree height. Ensure spray contacts all foliage.
	Eucalyptus spp.		1:5 Add an organosilicone penetrant at 20 mL/10 L spray mixture.	

<b>Foliar Application High Volume (Knapsack or handgun)</b>	Eucalyptus spp. Willows ( <i>Salix babylonica</i> )	0-2.0 m height	1.0-1.3 L per 100 L.  For Eucalyptus spp. Add an organosilicone penetrant at 200 mL/100 L spray mixture.	Spray to wet all foliage. Use the higher rate for trees 1.0-2.0 m high.
<b>Cut Stump</b>	Jarrah ( <i>Eucalyptus marginata</i> ), Longleaf Box ( <i>E. goniocalyx</i> ), Marri ( <i>E. calophylla</i> ), Messmate Stringybark ( <i>E. obliqua</i> ), Narrowleaf Peppermint ( <i>E. radiata</i> )	0-10 cm basal diameter	1:15	Dilute product with water in the recommended ratio. Cut the tree close to the ground and immediately wet stump surface thoroughly using Splatter gun, spray, swab or brush. Remove any branches on the stump and treat cut surface.
	Privet ( <i>Ligustrum</i> spp.), Rhus ( <i>Toxicodendron succedaneum</i> )	0-30 cm basal diameter	1:1	

**AQUATIC WEEDS**

WEEDS CONTROLLED	RATE			CRITICAL COMMENTS
	Boom L/ha	Knapsack mL/15 L	Handgun Vol/100 L	
				<p>Reduction in effectiveness may result if more than ¼ of the above ground portion of the weed is submerged at treatment. Submerging the treated plants following treatment may result in the spray being washed from the plant surface, thus reducing the effectiveness. <b>DO NOT</b> apply this product within 0.5 km of potable water intake in flowing water (i.e. rivers, streams etc.) or within 0.5 km of a potable intake in a standing body of water such as a lake, pond or reservoir. Applications to moving bodies should be made while travelling up-stream whenever possible to prevent concentration of this herbicide in water. When making any bankside applications, <b>DO NOT</b> overspray more than 0.5 m into open water. Avoid spraying across moving bodies of water or where weeds do not exist. <b>DO NOT ADD EXTRA SURFACTANT/WETTER, UNLESS IT IS APPROVED IN AQUATIC SITUATIONS.</b></p> <p>When spraying floating weeds, use a low volume, low pressure boom spray, CDA or sprinkler sprayer. <b>DO NOT</b> submerge the weeds when spraying as this may wash the herbicide off the leaves. When emerged infestations require the treatment of the total surface area of impounded water, treating the area in strips may avoid sudden impact on habitat.</p>

Alligator Weed	-	150 mL	1 L	Apply when actively growing, from summer through winter. Floating form only.
Brown beetle grass	3 L	75 mL	500 mL	Apply to actively growing plants. DO NOT apply to partially submerged plants.
Cumbungi ( <i>Typha</i> spp.)	9 L	200 mL	1.3 L	Spray during Summer or Autumn period during the heading stage. Except for Tasmania, wiper equipment can be used. Refer to information on Application Equipment section of the label.
Paragrass ( <i>Brachiaria mutica</i> )				Spray at early head stage when plants are in active growth.
Phragmites Common reed ( <i>Phragmites australis</i> )				If the Wiper Technique is to be used, refer to Wiper Equipment section. Spray when plants are getting close to early head stage and actively growing. Spray symptoms may not be observed for a season or more.
Rushes ( <i>Juncus</i> spp.), Sedge – Tall ( <i>Cyperus gracilis</i> )	See Critical Comments			Use Wiper technique ensuring a high percentage of green matter is present. Refer to Wiper Equipment section for directions for use.
Water couch ( <i>Paspalum distichum</i> )	9 L	200 mL	1.3 L	Spray actively growing plants in February/March period. 75% of plants should be visible above the water line at time of spraying.
Water hyacinth	6-9 L	150-195 mL	1-1.3 L	Apply to actively growing plants at or beyond the early bloom stage of growth. Use the higher rate on dense infestations.
Water lettuce	-			Best results are obtained from mid-Summer through to Winter. Use the higher rate on dense infestations.
Waterlily, yellow	6 L	150 mL	1 L	Apply when there is a maximum emergence of floating leaves. Allow 2-3 weeks for symptoms to develop, and then re-treat any unaffected plants. Use a low volume sprayer.

**Conservation Tillage Situations – Land preparation prior to sowing:**

Includes directions for	Situation	Weeds Controlled	Rate	Critical Comments
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<p>use for: Land preparation prior to sowing (Winter crops, summer crops, fallow)</p> <ul style="list-style-type: none"> <li>- pasture renovation</li> <li>- pasture topping</li> <li>- pasture manipulation</li> <li>- rice (direct drilling)</li> <li>- sugar cane (ratoon control)</li> </ul>	<p>Where weed control is desired prior to sowing PASTURE or a WINTER crop and prior to disturbing the area to be sown with cultivation or tyned implements at sowing.</p> <p>SOUTHERN AUSTRALIA</p>	<p>Amsinckia (<i>Amsinckia</i> spp.), Fumitory (<i>Fumaria officinalis</i>), Lupins (volunteer) (<i>Lupinus albus</i>), Paterson's Curse/Salvation Jane (<i>Echium plantagineum</i>), Saffron Thistle (<i>Carthamus lanatus</i>), Scotch Thistle (<i>Onopordum acanthium</i>), Spear Thistle (<i>Cirsium vulgare</i>), Variegated Thistle (<i>Silybum marianum</i>)</p>	<p><b>L/ha</b></p> <p>&lt;12 cm diameter: 1-1.25 L</p> <p>&gt;12 cm diameter: 1.25-1.5 L</p>	<p><b>All weeds:</b> Spray when weeds are actively growing. Ensure regrowth is 6-8 cm in height if intensive grazing occurred prior to spraying OR cold/overcast conditions are present at the time of spraying.</p> <p><b>Cultivation of Sowing:</b> This may start 1-21 days after spraying. If Dock, Phalaris, Skeleton Weed, Soursob or Sorrel are present do not cultivate or sow for at least 7 days after spraying. Product will normally only give knockdown reduction in plant numbers and seasonal suppression of these weeds. If cultivation does not take place within 21 days, re-treatment may be necessary.</p> <p><b>Tank mixes:</b> Refer to section entitled Compatibility of this booklet if it is planned to spray in conjunction with a herbicide for residual control, improved performance or if you wish to uses an insecticide. Read label carefully for conditions of use.</p> <p><b>Tasmania Only:</b> Use 1.5 L/ha on annual weeds. Increase to 3 L/ha where perennial weeds are being treated. Added surfactant is recommended at all spray volumes. To control clover and improve control of Sorrel and Dock, add 400 mL/ha dicamba (500 g/L). Observe plant back periods and directions on Dicamba label.</p> <p><b>Successful Crop Establishment:</b> Early sprays to control young weeds will lead to establishing an ideal seed bed. If weed growth is heavy, sowing should be delayed until</p>
		<p>Annual Phalaris (<i>Phalaris paradoxa</i>), Annual Ryegrass (<i>Lolium rigidum</i>), Silver Grass (<i>Vulpia</i> spp.)</p>	<p>Pre-tillering: 1-1.25 L</p> <p>Post-tillering: 1.25-1.5 L</p>	
		<p>Barley Grass (<i>Hordeum leporinum</i>), Brome Grass (<i>Bromus</i> spp.), Cereals (volunteer)</p>	<p>Pre-tillering: 500 mL-1 L</p> <p>Post-tillering: 1.25-1.5 L</p>	
		<p>Capeweed (<i>Arctotheca calendula</i>), Doublegee (<i>Emex australis</i>)</p>	<p>&lt;8 cm diameter: 500 mL – 1 L</p> <p>&gt;8 cm diameter: 1-1.25 L</p>	
		<p>Perennial Phalaris (<i>Phalaris aquatica</i>), Skeleton Weed (<i>Chondrilla juncea</i>) (Spray only rosettes that have fully emerged – NSW only), Sorrel (<i>Rumex acetosella</i>), Soursob (<i>Oxalis pes-caprae</i>), Sub Clover (<i>Trifolium subterraneum</i>)</p>	<p>1.5 L</p>	
		<p>Dock (seedlings) (<i>Rumex obtusifolius</i>)</p>	<p>1-1.25L</p>	

				<p>matter has decayed as the emerging crop shoots may be smothered and set back. Light cultivation to leave decaying matter on surface may help. If using residual type pre-emergent herbicides, seek out label directions that advise of risks associated with crop emergence.</p> <p><b>Perennial Weeds:</b> For perennial Phalaris, Soursob, Skeleton Weed and Sorrel, this product will provide knockdown, seasonal suppression and reduction in treated plant numbers.</p>
<p>Where weed control is desired prior to sowing a Summer Crop or prior to the preparation of a fallow.</p> <p>SOUTHERN AUSTRALIA</p>	<p>Annual Ryegrass (<i>Lolium rigidum</i>), Brome Grass (<i>Bromus</i> spp.), Capeweed (<i>Arctotheca calendula</i>), Paterson's Curse/Salvation Jane (<i>Echium plantagineum</i>), Saffron Thistle (<i>Carthamus lanatus</i>), Scotch Thistle (<i>Onopordum</i>), Silver Grass (<i>Vulpia</i> spp.), Spear Thistle (<i>Cirsium vulgare</i>), Wild Mustard (<i>Sisymbrium officinale</i>), Wild Radish (<i>Raphanus raphanistrum</i>), Wild Turnip (<i>Brassica tournefortii</i>)</p>	1.5-2 L	<p><b>All Weeds:</b> Spray when weeds are actively growing. Ensure regrowth is 6-8 cm in height if intensive grazing occurred prior to spraying. Add wetting agent to spray solutions at the recommended rate if Ryegrass is present. Use higher rates under the following conditions: Grasses – full tillering. Broadleaf weeds – stem elongation or budding. Lower rates should be used on younger stages of the weeds or where cultivation is to follow within three weeks.</p> <p><b>Tank Mixes:</b> Refer to section entitled</p> <p>Compatibility if it is planned to spray in conjunction with a residual herbicide. Read label carefully for conditions of use.</p> <p><b>Hoary Cress:</b> Spray from late rosette to early flowering stage.</p> <p><b>Soursob:</b> Spray at tuber exhaustion.</p>	
	<p>Barley Grass (<i>Hordeum leporinum</i>), Cereals (volunteer), Wild Oats (<i>Avena</i> spp.)</p>	1-1.5 L		
	<p>Hoary Cress (<i>Cardaria draba</i>), Soursob (<i>Oxalis pes-caprae</i>)</p>	1.5 L		



	Where weed control is desired prior to sowing a summer or winter crop in fallow situations.  NORTHERN AUSTRALIA	Amaranth ( <i>Amaranthus macrocarpus</i> ), Annual Ground Cherry ( <i>Physalis angulata</i> ), Australian Bluebell ( <i>Wahlenbergia gracilis</i> ) (Qld only), Barnyard grass ( <i>Echinochloa</i> spp.), Cudweed ( <i>Gnaphalium</i> spp.), Caltrop ( <i>Tribulis terrestris</i> ), Fumitory ( <i>Fumaria officinalis</i> ), Lovegrass ( <i>Eragrostis curvula</i> ), Mexican poppy ( <i>Argemone ochroleuca</i> ), Mintweed ( <i>Salvia reflexa</i> ), New Zealand Spinach ( <i>Tetragonia tetragonoides</i> ), Noogoora Burr ( <i>Zanthium pungens</i> ), Saffron Thistle ( <i>Carthamus lanatus</i> ), Sow Thistle ( <i>Sonchus oleraceus</i> ), Sorghum (volunteer), Spear Thistle ( <i>Cirsium vulgare</i> ), Spurge ( <i>Euphorbia</i> spp.), Sunflower (volunteer) ( <i>Helianthus annuus</i> ), Turnip Weed ( <i>Rapistrum rugosum</i> ), Variegated Thistle ( <i>Silybum marianum</i> ), Wild Lettuce ( <i>Lactuca serriola</i> ), Wild Turnip ( <i>Brassica tournefortii</i> )	1-1.5 L	<p><b>All Weeds:</b> Spray when weeds are actively growing. Ensure growth is 6-8 cm in height if intensive grazing occurred prior to spray time. DO NOT spray weeds under stress from low moisture, frost, cold disease or waterlogging. Note that Barnyard Grass and Liverseed Grass are particularly prone to moisture stress.</p> <p><b>Rate Selection:</b> Use lower rate on young weeds. Increase to higher rates as grasses gain fill tillering or as broadleaf weeds gain elongation/budding. At more advanced stages, some broadleaf weeds need a higher rate range or addition of 2,4-D.</p> <p><b>Tank Mixtures:</b> Read label directions, restraints, plant back and withholding periods and safety directions. See Compatibility section.</p> <p><b>Crop Establishment:</b> Sowing should not proceed until conditions allow the formation of a satisfactory seedbed.</p> <p><b>All Weeds – Aerial Application:</b> See Aerial Equipment section for use in high temperatures and dry conditions. DO NOT apply this product when temperatures exceed 30°C.</p> <p>For Annual Ground Cherry, Sow Thistle, Turnip Weed, Wild Lettuce, Wild Turnip use higher rate after stem elongation or budding.</p>
		Annual Phalaris ( <i>Phalaris paradoxa</i> ), Barley Grass ( <i>Hordeum leporium</i> ), Cereals (volunteer), Wild Oats ( <i>Avena</i> spp.)	500 mL – 1 L	

## Pasture Renovation

SITUATION	APPLICATION RATE	CRITICAL COMMENTS
<p>A high predominance of Poa Tussock (<i>Poa labillardieri</i>) associated with annual weed situations.</p>	<p>3-4 L/ha</p>	<p><b>TIMING:</b> Graze heavily, then remove stock at least 2 weeks before spraying to allow new growth. Apply to actively growing plants after the Autumn break but before heavy frosts (March-May).  <b>APPLICATION:</b> Increasing to the higher rate may give more effective reductions. If aerial spraying see Aerial Equipment.  <b>FOLLOW-UP MANAGEMENT:</b> Sowing may start from 2 weeks after spraying. It is essential that correct follow-up pasture establishment and management occurs after treatment. Spot treatment will limit re-infestation.</p>
<p>A high predominance of Bent Grass (<i>Agrostis tenuis</i>) associated with Annual weeds.</p>	<p>2.5 L/ha</p>	<p>This rate will give control/suppression prior to planting improved pasture or crops. Spray in late Spring when weeds are in active growth phase and have a degree of seed head development. Remove stock to ensure full leaf growth 2-3 weeks after spraying using a tyned implement to disturb the soil and break up vegetative matter. Follow up by planting a summer crop and/or re-seeding pasture or crop next Autumn.</p>

### Pasture Topping

SITUATION	WEEDS CONTROLLED	APPLICATION RATE	CRITICAL COMMENTS
Pasture topping to reduce seed set of Annual Grasses and Capeweed ( <i>Arctotheca calendula</i> )	Annual ryegrass ( <i>Lolium rigidum</i> )	450 mL	Apply at flowering stage and prior to plants "haying off".
	Barley grass ( <i>Hordeum leporinum</i> ), Brome grass ( <i>Bromus</i> spp.), Silver grass ( <i>Vulpia</i> spp)	300-450 mL/ha	Apply at the head to milky dough stage.
	Capeweed ( <i>Arctotheca calendula</i> )		Apply at flowering stage and prior to plants "haying off".
			<p><b>All Weeds:</b> Ensure even regrowth by removing all stock prior to treatment. If pasture legumes are present their populations may be reduced. DO NOT apply if clover or medic crops intended for seed are present. Water volumes of 50 L/ha or less are preferable. If excess of this is required, add a wetting agent at recommended label rates.</p>

### Pasture Manipulation

SITUATION	STATE	WEEDS CONTROLLED	APPLICATION RATE	CRITICAL COMMENTS
Where certain pasture species need to be controlled or suppressed prior to the drilling of forage species of soybeans	NSW, Vic, WA only	Carpet grass ( <i>Axonopus</i> spp.), Kikuyu grass ( <i>Pennisetum clandestinum</i> ), Paspalum ( <i>Paspalum dilatatum</i> )	1.4-6 L/ha	Use higher rates for control.  Use lower rates for suppression.
	Qld only	Carpet grass ( <i>Axonopus</i> spp.), Paspalum ( <i>Paspalum dilatatum</i> )		
		Kikuyu grass ( <i>Pennisetum clandestinum</i> )	625 mL – 6 L/ha	

### Rice (Direct Drilling)

SITUATION	WEEDS CONTROLLED	APPLICATION RATE	CRITICAL COMMENTS
Sites where direct drilling of rice is to be carried out and site sprayed prior to direct drilling.	Annual Phalaris (Canary Grass) ( <i>Phalaris</i> spp.), Annual Ryegrass ( <i>Lolium rigidum</i> ), Barley Grass ( <i>Hordeum leporinum</i> ), Burr Medic ( <i>Medicago</i> spp.), Clover (sub) ( <i>Trifolium subterraneum</i> ), Winter Grass ( <i>Poa annua</i> )	1-1.3 L/ha	<b>All Weeds:</b> Site preparation should ensure that if grazing has taken place regrowth should be 6-8 cm tall before spraying. If drought conditions are present, pre-watering prior to spraying is recommended. If Ryegrass is present, use a wetting agent at recommended rates.  When to sow: Direct drilling can be carried out 1 day to 2 weeks after spraying. If a residual herbicide is to be used, refer to product's label instructions on mixtures and rice application.

### Sugar Cane (Ratoon Control)

SITUATION	VARIETY	APPLICATION RATE	CRITICAL COMMENTS
Sites where control of ratoon cane is required.	Q63, Q87, Q90, Q102, Q117, Q120, Q129, Q130, H56-752, Pindar, Triton	3-4 L/ha	Spray only if ratoons are in active phase and are 60-100 cm in height. DO NOT apply if plants are drought stressed or suffering effects of waterlogging. Ensure boom is at a height above the ratoon canopy that allows the correct overlap of the spray pattern. Use higher rates for control. Use lower rates for suppression if it is planned to follow up with cultivation.
	Q86, Q96, Q113	4-5 L/ha	
	Cassius, Q115, Q122, Q94	5-6 L/ha	
	NCQ 310, Q107	6-9 L/ha	

### Vines and Tree Crops

SITUATION	WEEDS CONTROLLED	APPLICATION RATE	CRITICAL COMMENTS
Nuts (includes Almond, Pistachio, Macadamia, Pecan and Walnut), Pome Fruit, Litchi, Stone Fruit, Vineyards, Citrus Fruit	See specific weed tables	See specific weed tables	<p><b>All Trees and Vines:</b> DO NOT spray near trees/vines less than 3 years old. DO NOT allow Wiper contact.</p> <p><b>AVOCADO, BANANA, GUAVA, KIWIFRUIT, LITCHI, MANGO PAW PAW AND STONE FRUIT:</b> Spray drift can cause damage if allowed to contact any part of the vine, palm, trunk or tree. Be careful to avoid contact with split bark in Kiwifruit and green stems on Paw Paw.</p> <p><b>Citrus, Litchi, Olives, Pome fruit, Nuts and Vineyards:</b> DO NOT allow spray to contact any part of the plant.</p>
Avocado, Guava, Kiwifruit, Mango, and Paw Paw			
Bananas			

### General Uses

SITUATION	WEEDS CONTROLLED	APPLICATION RATE	CRITICAL COMMENTS
Dry Drains and Channels, Dry Margins of Dams, Lakes and Streams	For weeds controlled refer to list of species under Annual Weed Control and Perennial Weed Control.	For Application Rates refer to rates shown under Annual Weed Control and Perennial Weed Control.	<p>See Critical Comments for section and individual weeds under Annual Weed Control and Perennial Weed Control. Use situations include prior to nursery establishment, site preparation prior to planting and in established tree areas using shielded or directed sprays or selective wiper equipment.</p> <p>DO NOT allow spray or spray drift to come into contact with foliage or green bark of desirable trees or severe damage may occur. DO NOT allow wiper surface to come into contact with any part of the tree.</p> <p>This product does not provide residual control.</p>
Forestry			
Rights-of-way, domestic and public service areas, commercial and industrial areas and around buildings			

### Onions

SITUATION	WEEDS CONTROLLED	APPLICATION RATE	CRITICAL COMMENTS
Post-planting or pre-emergent applications	For weeds controlled refer to list of species under Annual Weed Control and Perennial Weed Control.	1-3 L/ha	Ensure that spraying is carried out well in advance of emergence of onion shoots (7 days). Otherwise severe phytotoxicity will occur if onion plant comes into contact with herbicide. Take into consideration height and type of weeds present in determining the exact rate. For small annual weeds use lower rates and for large annual weeds (as a guide greater than 15 cm in height) and where perennial weeds are present, use the higher rates.

**Pasture Situations**

<b>SITUATION</b>	<b>WEEDS CONTROLLED</b>	<b>APPLICATION RATE</b>	<b>CRITICAL COMMENTS</b>
Where boom applications are used in pasture control prior to re-seeding of improved pasture crop.	For weeds controlled refer to list of species under Annual Weed Control and Perennial Weed Control.	For Application Rates refer to rates shown under Annual Weed Control and Perennial Weed Control.	See Protection of Livestock, Wiper Equipment and Conservation Tillage sections.

**Row Crops (Cotton, Peanuts, Soybeans, Sugar Cane)**

<b>SITUATION</b>	<b>WEEDS CONTROLLED</b>	<b>APPLICATION RATE</b>	<b>CRITICAL COMMENTS</b>
Where Wiper Equipment is used to control weeds in row crops.	For seeds controlled refer to list of species under Annual Weed Control and Perennial Weed Control.	1 L in 2 L water.	See Wiper Equipment section. Apply to weeds growing 15 cm above the crop canopy or weeds growing between rows. DO NOT allow this product to come into direct contact with crops or solution to drip onto crops.

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

## **PRODUCT INFORMATION**

This product is translocated throughout the plant where it kills both foliage and roots. Ideally the best time to use this product is when target species are in a state of active growth, moderate climatic conditions are present and the plants are free of disease and dirt cover. While cool and cloudy conditions can sometimes delay the appearance of chemical activity, it can generally be expected that symptoms of chemical effect will appear 2-7 days after spraying of annual species and 2-3 weeks after spraying of perennial species. The symptoms are demonstrated by a yellowing and accompanying wilting, progressing to a brown out.

## **SAFETY TO CROPS**

DO NOT allow this product to come into contact with the foliage, fruit or green stems of desirable crops, plants or trees as the nature of this chemical is non-selective.

Some useful guidelines that can help in this regard are:

1. Do not use if the wind is blowing towards desirable plants in close proximity.
2. Avoid fine droplet settings (150 micron or less) when calibrating.
3. Avoid spraying in winds greater than 8 km/hr, still air and hot days.

While the product is rapidly inactivated on contact with the soil, it is important that certain factors are kept in mind:

1. Where there is a light presence of unwanted vegetative matter sowing can commence from one day after spraying.
2. Where the plant cover is heavy it is better to allow vegetative matter to decay prior to sowing to allow formation of a satisfactory seedbed.

## **SPRAY PREPARATION**

1. Make sure the tank is clean and residues from previous usage have been removed.
2. Half fill the tank with clean water bearing in mind that less than perfect results may occur if water containing soil particles or hard water containing calcium salt is used. Glyphosate may be inactivated by water which is contaminated with clay particles or soil.
3. Add the appropriate amount of product as per the Directions for Use Tables.
4. Mix well keeping filling hose below surface to avoid foaming.
5. Add water to fill vat.
6. Remove hose from tank as soon as full to prevent back siphoning.

DO NOT use mechanical agitators as these may cause excessive foaming.

DO NOT add non-approved herbicides and insecticides.

Use only plastic, plastic lined, stainless steel, aluminium, brass, copper or fibreglass containers or spray tanks.

Galvanised steel or unlined steel containers or spray tanks can react with the product to produce hydrogen gas, which can form a combustible gas mixture which can be flashed by ignition sources.

## **SURFACTANT**

The addition of surfactant may improve weed control where water rates are high or product rates are low. Suggested surfactant rates are 200 mL/100 L of 1000 g/L non-ionic surfactant or 250-500 mL of 700 g/L surfactant. DO NOT add spraying oils, agricultural chemicals or any other material except as directed on the label.

## **ORGANOSILICONE PENETRANT**

In certain situations (as indicated in the Directions for Use table) weed control may be enhanced by the addition of an organosilicone penetrant 200 mL/100 L spray solution.

## **RAINFALL EFFECTS**

Heavy rain within 2 hours of spraying can mean that the chemical may be washed off the plant, with the result that the herbicide may not be totally effective. Re-spraying may be needed. Normal rain up to 6 hours after application may reduce the effectiveness. Adequate results may not be achieved if the product is applied when weeds are stressed by conditions such as drought conditions, water logging or frost.

## **SOIL PERSISTANCE**

This product is not persistent in soils and is rapidly broken down by microbes present in the soil, as well as by hydrolysis caused by free standing moisture or soil moisture that may be present in soil particles. Should residual activity be needed refer to the Compatibility section.

## **APPLICATION EQUIPMENT**

### **HIGH VOLUME APPLICATION:**

#### **(e.g. knapsack/handgun equipment)**

For maximum efficiency a D6 spray tip (Spraying Systems Australia P/L) or equivalent and an operating pressure of 400-700 kPa are recommended. As the product is translocated through contact points on the plant, good coverage is needed to maximise uptake by the plant. Volume used per given area will vary according to the density of the target species present.

### **BOOM EQUIPMENT**

Maximum efficiency can be achieved by using fan nozzles at a pressure of 240-280 kPa. Water volumes per hectare of treated area can vary depending on density of target species but no more than 200 L would be necessary. In conservation tillage situations volumes in the 50-100 L range would suffice.

### **AERIAL EQUIPMENT**

Using micronair and boom equipment a droplet size of 250-350 micron diameter is recommended. A swath width in the range of 15-17 metres is most appropriate for this form of spraying. Minimum spray volume would be 15 L/ha. When using this form of application give consideration to the fact that the product is highly non-selective and if desirable plants, trees etc. are in the vicinity of the area to be sprayed, they could be affected by drift or targeted contact. This would limit usage via this technique to such situations as weed control on fallows or pasture, control prior to establishment of crops or pasture. Another point to bear in mind is that on sloping terrain height above the ground may vary from point to point, and also at any given point, from boom tip to boom tip. It is also worth remembering that there is more land area on a hilly block than a flat block, even though the perimeter distance may be the same. In such situations increase the water volume to 30-80 L/ha and increase the droplet size to a minimum of 300 micron average size.

Note: In high temperatures and dry conditions, evaporation of droplets prior to reaching target species can occur and it is therefore important to increase water volume to at least 30 L/ha and average droplet size to 300 micron if temperatures are in excess of 25°C. DO NOT spray if temperature is above 30°C.

### **FOR WIPER EQUIPMENT:**

For wiper equipment such as ropewick applicators etc., detailed information should be obtained from the manufacturers. As a general guide 500 mL of product should be mixed with 1 L of water. Weeds should ideally be 15 cm above the crop or pasture. One pass in each direction, commonly referred to as a "double pass" will maximise effectiveness. The lower the vehicle speed the better the result. Certainly no faster than 8 km/hr is recommended. Where weeds are of variable height, or occur in



clumps or in dense infestations, some plants may not be contacted by the herbicide solution and re-treatment may be necessary. Mix only enough solution for immediate requirements. DO NOT store mixed solution for more than a couple of days.  
Rate: Mix 1 L of product with 2 L clean water to prepare a 33% solution. Refer to the Weeds Controlled section of the label for specific recommendations.

**LOW VOLUME APPLICATION:****(e.g. Gas Gun or Splatter Gun)**

Apply as an even spray to cover all foliage. Refer to weeds controlled for the dilution and volume of mixture to be applied. If the dilution rate is specified as 1:9 this equals one part product plus 9 parts water.

**Controlled Droplet Application Equipment (CDA)**

Use the following table as a guide for achieving the correct application rates using the Micron Herbi or similar equipment. See Weeds Controlled tables for specific rates and use recommendations.

For hand held equipment a walking speed of approximately 1 m/sec (4 km/h) is recommended.

Rate of Surefire Weedpro Bioaqua 360 Herbicide delivered at 1 m/sec	3 L/ha	6 L/ha	9 L/ha
Mixture (by volume) Surefire Weedpro Bioaqua 360 Herbicide: water	1:3	1:1	2:1
Micron Herbi, nozzle	Blue	Blue	Yellow

DO NOT add oils to Surefire Weedpro Bioaqua 360 Herbicide /water mixture, otherwise difficulty in application and reduced weed control may occur.

**CAUTION: CDA equipment produces a fine spray pattern which is not easily visible. Ensure spray pattern or drift does not contact foliage or any other green tissue of desirable plants, since severe injury or destruction may result.**

**SPRAYER CLEAN UP:**

After use, clean all spray equipment thoroughly washing with clean water, in order to prevent corrosion to tanks, lines and nozzles. Aircraft used in application should be thoroughly washed with particular attention to wheels and landing gear.

**COMPATIBILITY:**

This product may be tank mixed with the following pesticides and additives. Read and follow all label directions, restraints, withholding periods, regional use restrictions and safety directions for the tank-mix products.

**ADDITIVES:****Crystalline Ammonium Sulphate**

Assists in minimising the antagonism in tank mixes of this product and flowable triazine herbicides. Use only crystalline ammonium sulphate not the prilled or granulated forms. To test the quality, dissolve 2 tablespoons in 2 litres of water and swirl gently for 2 minutes. If undissolved particles remain it is advisable to pre-dissolve the ammonium sulphate in the water prior to adding to the spray tank through a screen.

**HERBICIDES:**

Atrazine flowable\* or granular (do not apply the tank mix for control of barnyard grass), 2,4-D ester, dicamba, chlorsulfuron, simazine flowable\*, sulfometuron methyl, oryzalin/trifluralin, pendimethalin, metsulfuron methyl, oxyfluorfen, triasulfuron, LVE MCPA.

\* Add crystalline ammonium sulphate as per directions above.

The addition of oxyfluorfen at 75 mL/ha to recommended rates of this product prior to planting wheat or barley will improve knockdown and increase the speed at which weeds develop visible signs of phytotoxicity.

**INSECTICIDES:**

Phosmet, methoate, chlorpyrifos, fenitrothion ULV and emulsifiable concentrates of dimethoate and fenitrothion. Other insecticides have not been tested.

**DRIFT WARNING:**

DO NOT apply under meteorological conditions or from spraying equipment that could be expected to cause spray drift onto nearby susceptible plants, adjacent crops, crop lands or pastures. Equipment settings that produce fine droplets (150 micron or less), winds over 8 km/hr, inversion conditions, still air and hot dry days all contribute to drift.