



The miracles of science™

DuPont™ Brush-Off®

brush controller

Technical Information

Active Constituent:
600 g/kg METSULFURON METHYL

Pack Sizes:
40 g
200 g
500 g

GROUP	B	HERBICIDE
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READ SAFETY DIRECTIONS BEFORE OPENING OR USING

For the control of certain brush and broadleaf species in native pastures, rights of way and commercial and industrial areas and for the control of certain broadleaf weeds in grass pastures and pasture renovations as per the Directions for Use.

SAFETY DIRECTIONS

May irritate the eyes and skin. Avoid contact with eyes and skin. **DO NOT** inhale dust or spray mist. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre (ph 13 11 26).
For further information refer to the Material Safety Data Sheet.

GENERAL INSTRUCTIONS

Always add a surfactant/wetting agent. (See section 'Use of Surfactant/Wetting Agent').

Allow weeds to recover from grazing before application. Docks and Sorrel in particular require fresh leaf growth for adequate uptake of chemical.

Some grasses will be damaged in pasture sprayed with the product and biomass production may be reduced for several months. Brush-Off® used on established Perennial Phalaris and/or established Perennial Cocksfoot may cause temporary yellowing and some stunting. Brush-Off® can severely damage introduced grass species. Brush-Off® does not control/damage Silvergrass (*Vulpia* spp.), Barley grass (*Hordeum* spp.), Brome grass (*Bromus* spp.) or Winter grass (*Poa* spp.).

ALL grasses and legumes can be damaged and/or removed by a Brush-Off®/glyphosate mixture.

Legumes will be removed from pasture if over-sprayed with Brush-Off®. Some crops are extremely sensitive to low concentrations of this product. See "Sprayer Clean-up" section.

Where treatment is delayed or where weeds are not actively growing due to adverse conditions, results may be slow to appear and weeds may only be stunted or suppressed.

Instructions specific for brush and herbaceous weed control:

Apply when bushes/plants are actively growing. Where treatment is delayed or bushes/plants are not actively growing due to adverse conditions (such as a period of prolonged dry weather) or if partial spray coverage occurs, results may be slow to appear and subsequent regrowth may occur.

Should regrowth occur, re-treatment at the recommended rate is advised.

Re-treatment of blackberries should only be undertaken once regrowth has reached one (1) metre tall - this may not be until two (2) years after the initial application.

For control of bushes previously sprayed with other brush control herbicides or for bushes which may have been burned or slashed ensure two (2) years has elapsed.

Due to the widespread picking of blackberries by the public, it is recommended that the product is not applied to bushes bearing mature fruit.

Instructions specific for treatment of pasture or pasture renovation:

Sorrel seedlings may germinate after the break in the following year, particularly after cultivation.

The ungerminated clover seed bank is not affected by Brush-Off® application. Clover vigour is often increased in the year following application where seed banks are reasonable. The seed set of clover in the year of application of Brush-Off® will be significantly reduced particularly from the Winter-Spring application. This effect may impact on the clover seed bank therefore re-sowing may be necessary. Where clover seed banks are high re-sowing is not necessary.

For pasture topping situations a combination of Brush-Off® plus glyphosate can be used, however the Crop Rotation recommendations should be observed. Refer to the Directions for Use section of each product for the appropriate rate and critical comments for the target weed spectrum.

RESISTANT WEEDS WARNING

GROUP	B	HERBICIDE
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Brush-Off® is a member of the sulfonyleurea group of herbicides and has the inhibitor of the enzyme acetolactate synthase (ALS) mode of action. For weed resistance management, Brush-Off® is a Group B herbicide.

Some naturally-occurring weed biotypes resistant to Brush-Off® and other ALS inhibitor 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 Brush-Off® or other ALS inhibitor herbicides.

Some populations of Annual Ryegrass and a few broadleaf weeds are already known to be resistant to Brush-Off® and other ALS inhibitor herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, DuPont accepts no liability for any losses that may result from the failure of Brush-Off® to control resistant weeds.

To prevent, or at least minimise, the risk of resistant weeds occurring, use Brush-Off® in tank mixes (if appropriate) and/or rotations with herbicides having different modes of action effective on the same weed species. Large numbers of healthy surviving weeds can be an indication that resistance is developing. Efforts should be taken to prevent seed set of these survivors.

DO NOT make more than one application of an ALS inhibitor herbicide to a pasture in any one year. If the user suspects that an ALS inhibitor resistant weed is present, Brush-Off® or other ALS inhibitor herbicides should not be used.

Strategies to minimise the risk of herbicide resistance are available. Consult your farm chemical supplier, consultant, local Department of Agriculture or Primary Industries, or local DuPont representative.

Spray Preparation

Brush-Off® is a dry flowable formulation to be mixed with water and applied as a spray. Partially fill the spray tank with water. Using the measuring cone provided measure the amount of product required for the volume to be sprayed. Add the correct amount of product to the spray tank with the agitation system engaged. Top up to the correct volume with water. **THE MATERIAL MUST BE KEPT IN SUSPENSION AT ALL TIMES BY CONTINUOUS AGITATION.**

When prepared spray solutions have been allowed to stand, thoroughly re-agitate before using. In tank mixes Brush-Off® must be in suspension before adding the companion herbicide or surfactant. Before spraying calibrate equipment to determine the quantity of water necessary to uniformly cover the measured area to be treated.

When tank mixing with glyphosate, **DO NOT** mix in a galvanised steel or unlined steel containers. Such tanks can react with glyphosate to produce hydrogen gas; this can form a combustible gas mixture, which may explode when ignited.

Use of a Surfactant/ Wetting Agent

ALWAYS ADD A SURFACTANT/WETTING AGENT.

Instructions specific for brush and herbaceous weed control.

If a specific surfactant/wetting agent is not listed in the Directions for Use table, or when mixing with glyphosate use a non-ionic surfactant (1000 gac/L) at 100 mL/100 L of final spray volume (ie 0.1 % volume/volume).

When an organosilicone penetrant (Pulse¹) is recommended in the Directions for Use table and with all gasgun applications, use 10 mL/5 L or 200 mL/100 L of final spray volume (ie 0.2 % volume/volume).

When a mineral spray oil (eg Caltex Sprayplus²) is recommended in the Directions for Use table, use 1 L/100 L of final spray volume (ie 1 % volume/volume).

Instructions specific for treatment of pasture and pasture renovation:

Always add a non-ionic surfactant (1000 gac/L) eg BS1000 or Chemwet 1000 at 200 mL/100 L of final spray volume (0.2 % volume/volume).

Compatibilities

Brush-Off® is compatible with the commonly used pasture herbicides MCPA amine, MCPA ester, 2,4-D amine, Lontrel³, Starane³, dicamba and the non-selective herbicide glyphosate.

Brush-Off® is compatible with the commonly used pasture insecticides chlorpyrifos (eg Chlorfos⁴, Lorsban³) and omethoate (eg Le-mat).

Refer to the label of the other product(s) being mixed with Brush-Off®, and follow any instructions and/or restrictions surrounding use.

APPLICATION

Handgun Application

Spray foliage and canes until wet. Ensure coverage is uniform and complete. Use pressures of 550–750 kPa (80 -100 psi) depending on target species and size of bush. Use larger nozzles and higher pressures for largest bushes.

For example:

Size No. 4 or 5 spray nozzle:	small individual bushes or broadleaf weeds - less than 1m high
Size No. 5 or 6 spray nozzle:	medium sized bushes – 1-2 m high
Size No. 7 or 8 spray nozzle:	large bushes 2-3 m high or of a large diameter.

NOTE: Use large spray nozzle/high volume for blackberry regrowth.

Spray using a wide cone setting as much as possible. Use even, side-by-side spray pattern moving up from the base to the top of the bush as leaves are wet. For blackberries, **DO NOT** ignore runners to the side or the top of the bush and ensure spray penetrates larger bushes to wet foliage and canes.

Gas Gun Application

Apply to ensure good coverage of all foliage is achieved. The use of a suitable marker dye is recommended.

Boom Spray Application

Use a boom spray properly calibrated to a constant speed or rate of delivery to ensure coverage and uniform spray pattern. Adjust boom height to ensure correct spray overlap. Avoid spraying where drift can go onto crops, area likely to be planted to crops and non-target pastures as injury may occur. Apply in a minimum of 150 L prepared spray/ha. Increase to 200 L prepared spray/ha or more in dense stands. In pasture applications apply a minimum of 70 L prepared spray/ha.

Aerial Application - (by helicopter only)

Apply in a minimum of 100 L per ha on Blackberries or 60 L per ha on Mimosa pigra and up to 200 L prepared spray/ha. Higher water volumes may be necessary to ensure adequate coverage where bushes are large and terrain is steep. Spray with a properly calibrated helicopter using the half overlap opposite pass technique. Avoid spraying in still conditions and where conditions favour temperature inversions. Avoid spraying where drift can go onto crops, areas likely to be planted to crops and non-target pastures as injury may occur. Turn off spray booms whilst passing over creeks and dams.

Sprayer Cleanup

Immediately after spraying remove all traces of Brush-Off® from mixing and spray equipment.

Drain the tank, then flush tank, boom and hoses with clean water for a minimum of 10 minutes.

Fill the tank with clean water and add 300 mL of 4 % chlorine solution (hypochlorite form) per 100 L of water. Flush through boom and hoses, then allow to stand for 15 minutes with agitation engaged, then drain and repeat this step. Nozzles and screens should be removed and cleaned separately. To remove traces of chlorine bleach, rinse the tank thoroughly with clean water and flush the hoses and boom.

DO NOT use chlorine bleach with ammonia. All traces of liquid fertiliser, ammonia, ammonium nitrate or ammonium sulphate must be removed with clean water before adding chlorine bleach. Failure to do this will release a gas with a musty odour which can cause eye, nose, throat and lung irritation. **DO NOT** clean equipment in an enclosed area.

Crop Rotation Recommendations

The use of Brush-Off® may prevent early re-establishment of legumes and grasses after treatment. The period that residues persist in the soil will vary according to site conditions such as climate, soil pH, presence of soil microorganisms, soil temperature, soil moisture and the rate used. Breakdown is fastest in warm wet acid soil and slower in cold dry alkaline soils.

The Brush-Off® treated area may be replanted to any of the specified pasture species after the interval indicated in the following table:

Soil pH*	Pasture Species	Rate g/ha	Minimum Rainfall	Minimum Recrop Interval	
5.5 and below	Sub Clover ^(a) and Haifa White Clover	5	150 mm	12 weeks	
		10		20 weeks	
		15		20 weeks	
	Cocksfoot spp. and Phalaris spp.	5		8 weeks	
		10		8 weeks	
		15		16 weeks	
	Perennial Ryegrass spp. and Fescue spp.	5	100 mm	16 weeks	
		10		16 weeks	
		15	150 mm	20 weeks	
5.6 - 6.5	Sub Clover ^(a) , Haifa White Clover, Perennial Ryegrass spp. and Fescue spp.	Bioassay ^(b)			
		Cocksfoot spp. and Phalaris spp.	5, 10	175 mm	12 weeks
			15	Bioassay ^(b)	
6.6 and above	Bioassay ^(b)				

(a) Varieties: Junea, Karridale, Seaton Park and Trikkala.

(b) Tolerance of pasture species should be determined on a small scale, in the previous season, before sowing into larger areas.

* Soil pH is to be determined by laboratory analysis using the 1:5, soil water suspension method. **DO NOT** replant to any other crop without first consulting the local DuPont representative.

For rates higher than 15 g/ha the following applies:

- For soils with a pH below 7 (1:5 soil:water method) a minimum period of 12 months should elapse before oversowing treated areas with grasses or legumes. It is suggested that small areas be oversown 1-2 months prior to the planned time for sowing to check for possible harmful residues.
- For soils with a pH greater than 7 or if planting any other crop, **DO NOT** replant without first consulting the local DuPont representative.

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

DO NOT apply or drain or flush equipment on or near native or non-target trees or other plants or on areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots.

DO NOT apply under weather conditions, or from spraying equipment that may cause spray to drift onto adjacent crops and non-target vegetation, or onto agricultural land scheduled to be planted to other crops as injury to the crop may occur.

PROTECTION OF WILDLIFE, FISH, CRUSTACEA AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

PROTECTION OF LIVESTOCK

A nil withholding period is applicable to Brush-Off®. It is recommended, however, not to graze treated areas for 7 days prior to application and 7 days after application to allow adequate chemical uptake in target weeds.

STORAGE AND DISPOSAL

KEEP OUT OF REACH OF CHILDREN. Store in the closed, original container in a dry, cool, well-ventilated area, out of direct sunlight. Triple or preferably pressure rinse containers before disposal. Add rinsings to the spray tank. **DO NOT** dispose of undiluted chemicals on site. If recycling replace cap and return clean containers to recycler or designated collection point. If not recycling, break crush or puncture and bury empty containers in a local authority landfill. If not available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

IN A MEDICAL EMERGENCY CALL
1800 674 415 All hours

NOTICE TO BUYER

To the extent permitted by law all conditions and warranties and statutory or other rights of action which buyer or any other user may have against DuPont or Seller are hereby excluded. DuPont hereby gives notice to buyer and other users that it will not accept responsibility for any indirect or consequential loss arising from reliance on product information or advice provided by DuPont or on its behalf unless it is established that such information or advice was provided negligently and that the product has been used strictly as directed. DuPont's liability shall in all circumstances be limited to replacement of the product or a refund of the purchase price paid therefore.

APVMA Approval number: 46401/1002

DIRECTIONS FOR USE RESTRAINTS

DO NOT treat newly sown pastures as severe damage may occur.

DO NOT use on pasture seed crops.

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

DO NOT apply if rainfall is expected within 4 hours.

DO NOT store a suspension of Brush-Off® for more than 2 days otherwise significant breakdown will occur.

DO NOT store a tank mix of Brush-Off® and glyphosate for more than one day otherwise significant breakdown may occur.

DO NOT store other tank mixtures of Brush-Off®.

SECTION A – GROUND APPLICATION FOR CONTROL OF BRUSH AND HERBACEOUS WEEDS IN NATIVE PASTURES, RIGHTS OF WAY, COMMERCIAL AND INDUSTRIAL AREAS.

SITUATION	WEEDS CONTROLLED	STATE(S)	RATE #			CRITICAL COMMENTS
			Boom g/ha	Handgun g/100 L	Gas gun g/L	
Native Pastures*, rights of way, commercial and industrial areas	Alligator weed (<i>Alternanthera philoxeroides</i>)	NSW, Qld only	80	10	-	Apply in terrestrial situations only. Follow-up applications over at least two seasons are essential for complete control.
	Apple Box (<i>Angophora floribunda</i>) Messmate Stringybark (<i>Eucalyptus obliqua</i>) Peppermint Gum (<i>E. radiata</i>) Red Gum (<i>E. blakelyi</i>) Yellow box (<i>E. melliodora</i>)	NSW, Qld, SA	-	10 + an organo-silicone penetrant (200 mL/100 L)	1 + an organo-silicone penetrant (10 mL/5 L)	Apply to plants up to 4 m high. Avoid spraying when plants are stressed. Ensure thorough foliage cover. Results can not be guaranteed where suckers originate from large lignotubers.
	Australian Blackthorn (<i>Bursaria spinosa</i>)	NSW, Qld, Tas, Vic only	-	10	-	Apply when bushes are actively growing. Avoid spraying when bushes are stressed. Handgun - Spray to thoroughly wet all foliage, but not to cause run-off.
	Bellyache bush (<i>Jatropha gossypifolia</i>)	Qld only	-	10 + organo-silicone penetrant (200 mL/100 L)	-	
	Bitou bush/Boneseed (<i>Chrysanthemoides monilifera</i>)	NSW, Qld, Vic, SA only	-	10	1 + organo-silicone penetrant (10 mL/5 L)	Spray to thoroughly wet all foliage. Minimise contact with desirable species.
	Blackberry (<i>Rubus spp.</i>)	ALL STATES	-	10 + mineral crop oil (1 L/100 L)		Apply when bushes are actively growing; (Tas only: Apply after petal fall.) (Vic only: Apply between December and April). Spray to thoroughly wet all foliage and canes. Ensure peripheral runners are sprayed. In Tasmania, DO NOT apply to bushes carrying mature fruit.

SECTION A (CONTINUED)

SITUATION	WEEDS CONTROLLED	STATE(S)	RATE #			CRITICAL COMMENTS
			Boom g/ha	Handgun g/100 L	Gas gun g/L	
Native Pastures*, rights of way, commercial and industrial areas	Bridal creeper (<i>Myrsiphyllum asparagoides</i>)	SA only	-	5	-	Apply during mid June to late August. Follow-up applications over at least 2 seasons will be required for complete control. Water volumes of 500 - 800 L/ha are recommended to minimise the risk of damage to native vegetation.
	Common Bracken (<i>Pteridium esculentum</i>)	ALL STATES	60	10	-	Spray after full frond expansion. Spray to thoroughly wet all foliage, but not to cause run-off. For boom application - adjust boom height to ensure correct spray overlap. Avoid spraying when plants are stressed or in conditions of prolonged dry weather when soils are dry.
	Crofton weed (<i>Eupatorium adenophorum</i>)	Qld, NSW only	-	15	-	Spray to thoroughly wet all foliage, but not to cause run-off. Extra care should be taken to get good spray penetration when spraying bushes situated in thickets. Apply to actively growing weeds up to early flowering. Best results obtained on younger plants. If regrowth occurs, retreat in the subsequent growth period.
	Darling Pea (<i>Swainsona spp.</i>)	NSW only	10	-	-	Apply during spring.
	Fennel (<i>Foeniculum vulgare</i>)	NSW only	-	10	-	Apply to actively growing plants.
	Golden Dodder (<i>Cuscuta australis</i>)	NSW, Qld, Vic, SA only	-	1	-	Apply as a spot spray to point of run-off. Ensure correct coverage of infested area. Apply pre-flowering.
	Great Mullein (<i>Verbascum thapsus</i>)	NSW only	20 + organo-silicone penetrant (200 mL/100 L)	-	-	Regrowth may occur if growing conditions are not good. Apply during spring at times of good soil moisture to rosettes before stem elongation.
	Harrisia Cactus (<i>Eriocereus spp.</i>)	Qld only	-	20	-	Spray to thoroughly wet using water volumes of 1,000 - 1,500 litres per hectare. A follow-up treatment may be necessary.
	Hawthorn (<i>Crataegus laevigata</i>)	NSW, Vic, Tas only	-	10	-	Apply when bushes are actively growing. Avoid spraying when bushes are stressed. Spray to thoroughly wet all foliage, but not to cause run-off.
	Inkweed (<i>Phytolacca octandra</i>)	Qld, NSW, only	-	5	-	Spray to thoroughly wet all foliage but not to cause run-off.
	Japanese Sunflower (<i>Tithonia diversifolia</i>)	NSW only	-	10	-	
	Kangaroo thorn (<i>Acacia paradoxa</i>)		-		-	Apply to bushes up to 2.5 m high when actively growing.
	Mistflower (<i>Eupatorium riparium</i>)	Qld, NSW only	-	5	-	Spray to thoroughly wet all foliage but not to cause run-off. Apply to actively growing weeds up to early flowering.
Noogoora burr (<i>Xanthium pungens</i>)	NSW only	-	7.5		Apply to actively growing plants. Plants under moisture stress will not be controlled.	

***WILL DAMAGE LEGUMES IN PASTURES**

ALWAYS ADD A SURFACTANT/WETTING AGENT - see the section "Use of Surfactant/Wetting Agent" in the General Instructions.

SECTION A (CONTINUED)

SITUATION	WEEDS CONTROLLED	STATE(S)	RATE #			CRITICAL COMMENTS
			Boom g/ha	Handgun g/100 L	Gas gun g/L	
Native Pastures*, rights of way, commercial and industrial areas	Parthenium (<i>Parthenium hysterophorus</i>)	Qld only	7	5	-	Handgun - Spray to thoroughly wet all foliage but not to cause run-off. Boom - (Pastures only). Apply up to rosette stage. Spray to thoroughly wet all foliage. Adjust boom height to ensure complete overlap.
		NSW only	-		-	
	Paterson's Curse/ Salvation Jane (<i>Echium plantagineum</i>)	ALL STATES	15	-	Boom - Spray to thoroughly wet all foliage. Adjust boom height to ensure correct spray overlap. Handgun - Spray to wet all foliage but not to cause run-off. WA only: Spray plants at early flowering stage (August-September).	
	Privet (<i>Ligustrum spp.</i>)	Qld, NSW only	-	10	1 + organo-silicone penetrant (10 mL/5 L)	Apply to bushes up to 3 m high. Complete foliar spray coverage is essential for control; partial spray coverage will result in regrowth recovery. DO NOT spray when bushes are stressed.
	Ragwort (<i>Senecio jacobaea</i>)	NSW, Vic, Tas, only	15	5	-	Apply to actively growing plants at rosette to cabbage stage.
	Rubber vine (<i>Cryptostegio grandiflora</i>)	Qld only	-	15	-	Apply to bushes up to 3 m tall in height. Apply from October through April when bushes are actively growing. Ensure thorough spray coverage of all foliage and leaders. Incomplete coverage will result in regrowth.
	Smartweed (<i>Polygonum spp.</i>)	Qld, NSW only	10	10	-	Apply to actively growing plants.
	Sweet Briar (<i>Rosa rubiginosa</i>)	NSW, Vic, Tas, SA only	-	10	1 + organo-silicone penetrant (10 mL/5 L)	Apply when bushes are actively growing. Avoid spraying when bushes are stressed, when leaf fall has commenced or after the end of February. Handgun - Spray to thoroughly wet all foliage, but not to cause run-off. Vic only: Gasgun - Apply to bushes less than 2 m high as application to bushes in excess of 2 m high may produce variable results. Apply with shots of 25 mL of dilute product.
Wait-a-while/ Mysore thorn (<i>Caesalpinia decapetala</i>)	Qld, NSW only	-	-	-		
Wild Turnip (<i>Brassica tournefortii</i>)	NSW only	-	5	-	Apply to actively growing plants.	

***WILL DAMAGE LEGUMES IN PASTURES**

#ALWAYS ADD A SURFACTANT/WETTING AGENT - see the section "Use of Surfactant/Wetting Agent" in the General Instructions.

SECTION B – TANK MIXES OF BRUSH-OFF WITH GLYPHOSATE (360g/L). GROUND APPLICATION FOR CONTROL OF BRUSH AND HERBACEOUS WEEDS IN NATIVE PASTURES, RIGHTS OF WAY, COMMERCIAL AND INDUSTRIAL AREAS

HANDGUN APPLICATION ONLY Refer to the Glyphosate label (360 g/L) for Directions for Use

SITUATION	WEED	STATE	RATE # per/100 L	CRITICAL COMMENTS
Native Pastures*, rights of way, commercial and industrial areas	Blackberry – hybrid (<i>Rubus spp.</i>)	All States	10 g + glyphosate (360 g/L) 200 mL	Apply between January and April when bushes are actively growing; (Tas only: apply after petal fall). Spray to thoroughly wet all foliage and canes. Ensure peripheral runners are sprayed. In Tasmania DO NOT apply to bushes carrying mature fruit.
	Gorse (<i>Ulex europaeus</i>)	Vic, SA, NSW, and Tas only		Use the surfactant Pulse at a rate of 200 mL/100 L. Apply to bushes up to 2 m tall. Ensure thorough spray penetration and coverage of the whole plant.
	Lantana (<i>Lantana camara</i>)	Qld, NSW only		Apply to bushes up to 2 m tall. Spray to thoroughly wet all foliage and stems. Spray should penetrate through the bush.
	St Johns Wort (<i>Hypericum perforatum</i>)	NSW, Vic, SA, WA only		Add a non-ionic surfactant at the rate of 100 mL/100L. Spray to wet, but not to cause run-off.
	Tree-of-Heaven (<i>Allanthus altissima</i>)	NSW only		

***WILL DAMAGE GRASSES AND LEGUMES IN PASTURES**

#ALWAYS ADD A SURFACTANT/WETTING AGENT - see the section "Use of Surfactant/Wetting Agent" in the General Instructions.

SECTION C – GROUND APPLICATION FOR CONTROL OF CERTAIN BROADLEAF WEEDS IN TOLERANT GRASS PASTURES OR IN A PASTURE RENOVATION

CROP/SITUATION	WEED	STATE	RATE # g/ha	CRITICAL COMMENTS
NOTE: Always add a non-ionic surfactant (1000 gac/L) eg BS1000, Chemwet 1000 at 200 mL/100 L water (0.2 % v/v)				
ESTABLISHED PASTURES* TOLERANT GRASS SPECIES Perennial phalaris} Stands Perennial cocksfoot} greater than one year old OR PASTURE RENOVATION Use in rundown pastures to reduce weed burden before sowing with a pasture in the following year	Cape Tulip: Both one and two leaf (<i>Homeria spp.</i>)	Vic, SA, NSW, WA and Tas only	5	Apply at bulb exhaustion usually during July/early August. More than one year of application may be required to obtain control.
	Annual Clover (<i>Trifolium spp.</i>)	Vic, SA, NSW, WA, Qld and Tas only		Apply before flowering
	Dock spp. (<i>Rumex spp.</i>)		5-seedlings 10-established	Best results when applied in spring prior to bolting.
	Doublegee/Spiny Emex/Three Cornered Jack(s) (<i>Emex australis</i>)	WA only	5 or 10	Apply up to the 6 leaf stage. Use the higher rate on dense populations.
	Erodium/ Storksbill/Wild Geranium (<i>Erodium spp.</i>)	Vic, SA, NSW and Tas only		Use the higher rate on dense populations. Spray before flowering.
	Annual Medics (<i>Medicago spp.</i>)	Vic, SA, NSW, WA and Tas only	5	For best results apply before flowering
	Onion grass/Guildford grass (<i>Romulea rosea</i>)		15	Apply at bulb exhaustion usually late June/July before the onset of browning off caused by the helminthosporium fungus. When mixing with glyphosate use 10g/ha.
	Paterson's Curse/Salvation Jane (<i>Echium plantagineum</i>)	Vic, SA, NSW, WA, Qld and Tas only	10 or 15	Apply lower rate to small plants. Apply higher rate before bolting/flowering
	Ragwort (<i>Senecio jacobaea</i>)	Vic, SA, NSW and Tas only	15	Apply to actively growing plants at the rosette to cabbage stage.
	Sorrel (<i>Rumex acetosella</i>)	Vic, SA, NSW, WA and Tas only	5-seedlings 10-established	Best results when applied in spring prior to seed heads appearing.
Soursob (<i>Oxalis pes-caprae</i>)	5 or 10		Use the higher rate on dense stands. Spray before flowering for best results.	
Wild Garlic (<i>Allium vineale</i>)	15		Apply at bulb exhaustion usually July to early August. More than one year of application may be required to obtain control.	

*WILL DAMAGE LEGUMES IN PASTURES

#ALWAYS ADD A SURFACTANT/WETTING AGENT - see the section "Use of Surfactant/Wetting Agent" in the General Instructions.

SECTION D – AERIAL APPLICATION BY HELICOPTER

SITUATION	WEEDS CONTROLLED	STATE(S)	RATE # g/ha	CRITICAL COMMENTS
Native Pastures*, Rights-of-Way, Commercial and Industrial areas	Blackberry (<i>Rubus spp.</i>)	NSW, Tas, Vic only	160	Apply when bushes are actively growing. (Tas only: Apply after petal fall. DO NOT apply to bushes carrying mature fruit). (Vic only: Apply between December and April). Use not less than 100 L prepared spray/ha.
Flood Plains	<i>Mimosa pigra</i>	NT only	50 or 60	Use the higher rate when air temperature exceeds 35 °C. Apply in at least 60 L/ha of clean water. Use D6 or D8 nozzles with 45 swirl plates pressurised to 210 kPa to give a large droplet size. Apply when plant is actively growing. Avoid spraying when plants are stressed.

*WILL DAMAGE LEGUMES IN PASTURES

#ALWAYS ADD A SURFACTANT/WETTING AGENT - see the section "Use of Surfactant/Wetting Agent" in the General Instructions.

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

WITHHOLDING PERIOD

NOT REQUIRED WHEN USED AS DIRECTED

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