

DuPont[™] Velpar[®] L

herbicide

Technical Information

Active Constituent: 250 g/L HEXAZINONE

Pack Sizes:

GROUP **C** HERBICIDE

CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING

For the control of certain sedges, perennial grasses and broadleaf weeds around agricultural buildings. For the control of certain woody weeds in grazing pastures by the Spotgun® method and by stem injection as per Directions for Use table.

NOTICE (NSW ONLY)

WITH THE EXCEPTION OF REGROWTH LESS THAN 5 YEARS OLD AND UNDER THREE METRES TALL, THE CLEARING OF MORE THAN FIVE HECTARES OF TREES BY AERIAL, GROUND OR SPOTGUN APPLICATION IN NSW IS PROHIBITED, UNLESS SPECIFICALLY AUTHORISED BY PERMIT. THIS RESTRICTION DOES NOT APPLY TO WOODY WEEDS AND STEM INJECTION OF TREES.

SAFETY DIRECTIONS

Will irritate the eyes, and skin. Avoid contact with eyes and skin. Do not inhale spray mist. When opening the container and preparing and using the prepared spray wear elbow length PVC gloves and goggles. If product or spray on skin immediately wash area with soap and 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 contaminated clothing, gloves and face shield or goggles.

FIRST AID

If poisoning occurs, contact a Doctor or Poisons Information Centre. If swallowed and if more than 15 minutes from a hospital induce vomiting, preferably using Ipecac Syrup APF. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor. For further information refer to Material Safety Data Sheet.

GENERAL INSTRUCTIONS

The product is an effective foliar contact and soil active residual herbicide.

SPOTGUN® APPLICATIONS

a) To the Soil

For trees greater than 5m tall, consider the stem injection technique as it requires less product.

For best results on sucker regrowth use the rate recommended for the tallest bushes (trees) listed in the Directions for Use Tables, as suckers grow from the roots of previous trees with large food reserves.

Use the spear attachment for the Spotgun" when treating brush or timber on sloping ground. Apply on the uphill side of the slope to a depth of 2 to 3 cm.

Avoid application onto ash in recently burnt areas as this may reduce the treatment's effectiveness.

The product can be applied through the SPOTGUN® at any time of the year; but results may be slow to appear if application is made to dry soil.

For optimum results the following conditions are required:

- Moist soil at application, or sufficient rainfall after treatment to promote root absorption by the target bush or trees.
- b) Active plant growth.

Either the on-surface nozzle or spear attachment of the SPOTGUN $^{\!\circ}$ may be used. When using the on-surface nozzle apply the product onto bare soil.

In areas where there is pasture growth or leaf litter covering the soil surface, best results are obtained using the ${\sf SPOTGUN}^\circ$ with its spear attachment.

Use the spear attachment for the SPOTGUN when treating brush or timber on sloping ground. Apply on the uphill side of the slope to a depth of 2 to 3 cm.

Small patches of pasture with its roots extending under the applied spot will also be controlled. Pasture will re-establish itself in affected areas, normally within 12 to 24 months of application.

Individual Brush/Tree

All spots to be placed between the base and the dripline unless otherwise specified.

Where only two spots are applied per plant, place spots on either side of the plant.

Where applicable, apply multiple spots each evenly spaced around the plant.

Grid Pattern Application

Unless otherwise indicated;

Bushes/trees up to 1 m tall

- (i) when the target plant density is less than 10,000/ha (ie. plants more than 1 m apart), treat on an individual stem basis.
- (ii) when target plant density is 10,000/ha and greater (ie. plants 1 m or less apart), treat using the 1x1 m grid pattern technique.

Bushes (trees) 1 to 7 m tall or suckers

- (i) when target plant density is less than 2,500/ha (ie. plants more than 2 m apart), treat on an individual stem basis.
- (ii) when target plant density is 2,500/ha and greater (ie. plants 2 m or less apart), treat using the 2x2 m grid pattern technique.

b) Stem Injection Application

For multi-stemmed trees, treat each stem as an individual tree.

Bushes (trees) up to 5 m tall. 1 cut/bush (tree) at waist height.

Trees 5 to 18 m tall. 30 cm centre to centre cut spacing around the circumference at waist height.

The Stem Injection technique requires less product than Spotgun® applications to the soil for Eucalypts greater than 5 m tall.

The product can be stem injected at any time of the year, but for best results treatment should be at a time of good sap flow. Avoid periods of drought stress.

It is recommended that the injection cuts be made at a comfortable height - ie. waist height.

Use a narrow bladed axe (5 to 7 cm wide blade) to make the cuts.

A suitable Tree Injector should be used to place the product into the

It is important that the axe cuts be made to the correct depth - this is down into the sap stream. Ensure the cuts are deep enough to properly penetrate the bark - the thickness of the bark varies from one species to another.

Ensure that the product is injected into the cut within 5 seconds of the cut being made. This ensures its proper absorption into the sap stream. Failure to do this may result in unsatisfactory control.

FOLIAR SPRAY APPLICATIONS

Use sufficient water for thorough uniform coverage.

For best foliar and residual control, apply as a post-emergent spray during the period of active plant growth and when the air temperatures are 250C and above. Applications when vegetation is dormant, semi-dormant, under moisture stress or during the winter months may not be as effective.

In temperate winter rainfall areas where temperatures are generally below 250C during the period of active plant growth, the foliar effect may be slow to appear. In these areas herbicide activity is more dependent on root absorption.

For residual control, sufficient rainfall is required after treatment to promote root absorption by the weeds.

Results obtained may vary with the amount of chemical applied, rainfall, air temperature, soil type and other conditions.

All use rates of the product are expressed as overall rates. For band treatment use proportionately less, ie. use one-third the overall rate when treating one-third of the area.

EQUIPMENT AND APPLICATION

- a) Spotgun® and Stem Injection
- i) Applications to the soil the product is to be applied using a DuPont Velpar® L Spotgun®.
- Stem Injection the product is to be applied using a suitable tree injector.
- b) Foliar Spray Applications

Velpar® L is a water miscible liquid formulation.

The product is mixed with water and applied at recommended rates with ground equipment.

Partially fill the spray tank with water and add the correct amount of the product for the area to be sprayed with the agitation system engaged. Top up to correct volume with water, and for best results keep the spray solution agitated whilst spraying. To prevent nozzle blockage, strainer and nozzle screens should be 50 mesh or coarser.

Ground Application - Apply in 100 - 400 L/ha with a properly calibrated boom or 2000 - 4000 L/ha with hand spray equipment.

USE OF SURFACTANT/WETTING AGENT

Use a surfactant/wetting agent for foliar spray applications only, by ground equipment.

A non-ionic surfactant/wetting agent may be added at the rate of 250-500 mL/100L of spray (for a surfactant containing 100% active constituent) for improved wetting.

PROTECTION OF LIVESTOCK

- a) Spotgun and Stem Injection Applications
 Stock don't need to be moved away from Spotgun and stem injection treated areas.
- b) Foliar Spray ApplicationsKeep stock away from sprayed areas.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate ponds, waterways and drains with the product or used containers.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

a) All Application Methods

THE PRODUCT MAY KILL MANY TREES AND OTHER DESIRABLE PLANTS IF NOT CORRECTLY APPLIED.

See also specific items listed for each use method.

DO NOT apply on or near desirable trees or other plants (except as recommended for crop use), or on areas where their roots may extend. as guidance this is two times their height, or more depending on the species and other conditions.

DO NOT apply in areas where a surface flow of water could wash the chemical into areas where the roots of desirable trees of plants may extend.

DO NOT drain or flush spray equipment, spotgun or stem injector near desirable trees or in areas where their roots may extend.

b) Foliar Spray Applications

DO NOT apply under windy conditions and in areas where spray drift could damage valuable plants.

DO NOT use on lawns, walkways, driveways or tennis courts.

STORAGE AND DISPOSAL

Store in the closed, original container in a well ventilated area, as cool as possible. **DO NOT** store for prolonged periods in direct sunlight. **DO NOT** use or store at temperatures of 0° C, or below, as the product will freeze.

Flammable, keep away from heat, sparks and naked flame.

Keep from contact with fertilisers, insecticides, fungicides and seeds. **DO NOT** re-use container. Triple or preferably pressure rinse containers disposal. Add rinsings to spray tank. DO NO dispose of undiluted chemicals on-site. If recycling return containers to recycler or point of sale. If not recycling break, crush, or puncture and bury empty containers in a local authority landfill. If not available bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and 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: 42637/02

DIRECTIONS FOR USE NON-FORESTRY APPLICATIONS SPOTGUN° TO INDIVIDUAL BUSH/TREE

SITUATION/ CROP	WEEDS CONTROLLED	STATE	RATE	CRITICAL COMMENTS	
Around agricultural buildings and in pasture situations.	Acacia spp. such as: Brigalow (A. harpophylla)	Qld, NSW Only	2 mL/spot 1 spot for each metre in height	Seedlings/bushes/trees up to 5m tall.	
	Silver Wattle (A. dealbata)	ALL STATES		For suckers use the rate as if	
	Currawang/Hickory (White wood) (A. doratoxylon)	Old, NSW, Vic, WA Only		seedlings/bushes/trees 5 m tall ie. 5 x 2 mL spots. Blackwood (A. melanoxylon) and Prickly Mimosa (A. verticillata) are not controlled at the recommended use rate	
	Prickly Acacia (Acacia nilotica)	Old, NSW	4 mL/spot	Seedlings/bushes/trees up to 5m tall.	
		Only	1 spot for each metre in height	Apply between October and March for best results.	
	Eucalyptus spp. such as: Poplar Box/Bimble Box (E. populnea)	Qld, NSW Only	2 mL/spot 1 spot for each	Bushes/trees up to 1 m tall**	
	Creswick Apple Box (Scent Bark) (E. aromaphloia) Grey Box/Gum-topped Box (E. moluccana)	NSW, Vic Only	bush/tree		
	Longleaf Box <i>(E. goniocalyx)</i>		4 mL/spot	Bushes/trees 1 to 3 m tall**	
	White Box (E. albens)		1 spot for each		
	Coolibah (E. microtheca)	Old, NSW, SA, WA Only	bush/tree 4 mL/spot 2 spots for each		
	Dawson Gum (E. cambageana)	Old Only			
	Mountain Grey Gum/Monkey Gum (E. cypellocarpa)	NSW, Vic, SA Only		Bushes/trees 3 to 7 m tall suckers.**	
	Blakely's Red Gum <i>(E. blakelyi)</i>	NSW, Vic Only			
	Red Ironbark/Mugga (E. sideroxylon)	Old, NSW, Vic Only	bush/tree		
	Congoo Mallee <i>(E. dumosa)</i>	NSW, Vic, SA Only			
	Yorrell (White Mallee) (E. glacilis)				
	Pointed Mallee (Red Mallee) (E. socialis)				
	Broadleaf Peppermint <i>(E. dives)</i> Narrowleaf Peppermint <i>(E. radiata)</i>	NSW, Vic Only			
	Brown Stringybark (E. baxteri)	Vic, SA Only			

See General Instructions page - for on-surface nozzle or spear attachment recommendations.

NON-FORESTRY APPLICATIONS SPOTGUN° TO INDIVIDUAL BUSH/TREE (continued)

SITUATION/ CROP	WEEDS CONTROLLED	STATE	RATE	CRITICAL COMMENTS
Around agricultural buildings and in pasture situations.	Eucalyptus spp. cont Messmate Stringybark (E. obliqua) Red Stringybark (E. macrorhyncha)	NSW, Vic, SA Only	2 mL/spot 1 spot for each bush/tree	Bushes/trees up to 1 m tall**
	White Stringybark (E. globoidea)	NSW, Vic Only	4 mL/spot 1 spot for each bush/tree	Bushes/trees 1 to 3 m tall**
			4 mL/spot 2 spots for each bush/tree	Bushes/trees 3 to 7 m tall suckers.**
	Bitterbark/Quinine Tree (Alstonia constricta)	Old, NSW Only	2 mL/spot	Bushes/trees up to 3 m tall**
	White Cypress Pine (Callitris columellaris)	ALL STATES	1 spot for each metre in	
	Monterey Cypress (Cupressus macrocarpa)	Vic Only	height	
	Dogwood/Common Cassinia/Dollybush (Cassinia aculeata)	NSW, Vic, SA, TAS Only		
	False Sandalwood/Budda (Eremophila mitchellii)	Qld, NSW Only	1	
	Whitewood (Atalaya hemiglauca)	Old, NSW, SA, WA Only		
	Broadleaf Teatree (Melaleuca virdiflora)	NSW, Qld Only		
	African Boxthorn (Lycium ferocissimum)	ALL STATES	4 mL/spot	1
	Yellow-wood (Terminalia oblongata)	Qld Only	1 spot for each metre in	
	Tree-of-Heaven (Ailanthus altissima)	NSW, Vic, WA Only	height	
	Sweet Briar (Rosa rubiginosa)	NSW, Vic, TAS Only	4 mL/spot 1 spot for each metre in height	Bushes up to 3 m tall** Deep rooted bushes may require retreatment if at two years they are still partially green. Place spot near base of plant.**
	Parkinsonia (Parkinsonia aculeata)	Old, NSW, WA Only	4 mL/spot 1 spot for each bush (tree)	Bushes/trees up to 5 m tall**
	Rubber vine (Cryptostegia grandiflora)	Old Only	2 mL/spot 3 spots for each bush (tree)	Bushes/trees up to 2 m tall
			·	Deep rooted bushes may require re- treatment if at two years they are still partially green. Place spots near base of plant.**
	Blackberry (Rubus spp.)	ALL STATES	4 mL/spot for each bush	Single crowned bushes up to 1 m tall Apply near base of crown.** Tas only: DO NOT apply to bushes which bear mature or near mature fruit.
	Limebush (Eremocitrus glauca)	Old Only	2 mL/spot 2 spots for each bush	Bushes up to 3 m high.

See General Instructions page - for on-surface nozzle or spear attachment recommendations.

NON-FORESTRY APPLICATIONS STEM INJECTION

SITUATION/CRO P	WEEDS CONTROLLED	STATE	RATE	CRITICAL COMMENTS
Around agricultural	Eucalyptus spp. such as	Qld Only	1 mL/cut	15 cm centre to centre cut.
buildings and in	Red Bloodwood (E. dichromophloia)		or	
pasture situations.	Creswick Apple Box (Scent Bark) (E. aromaphloia)	NSW, Vic Only	2 mL/cut	30 cm centre to centre cut.
	Grey Box/Gum-topped Box (E. moluccana)			
	White Box <i>(E. albens)</i>			Apply cuts to waist height.
	Coolibah <i>(E. microtheca)</i>	Qld, NSW, WA, SA Only		Regardless of bush/tree size apply a
	Blakely's Red Gum <i>(E. blakelyi)</i>	NSW, Vic Only		minimum of 2 mL for each bush/tree.
	Red Ironbark/Mugga (E. sideroxylon)	Qld, NSW, Vic Only		5 0 0 10 7 10
	Red Stringybark (E. macrorhyncha)	NSW, Vic, SA Only		For Grey Box/Gum Topped Box use
	Morton Bay Ash (E. tessellaris)	NSW, Qld Only		the narrow spacing ie. 15 cm.
	Brown Box <i>(E. microcarpa)</i>	NSW, Qld Only	0.5 mL/cut	15 cm centre to centre cut.
	Silverleaf Ironbark <i>(E. melanoploia)</i>		or	
	Tumbledown Gum <i>(E. dealbata)</i>		1.0 mL/cut	30 cm centre to centre cut.
	Poplar Box/Bimble Box (E. populnea)			
				Regardless of bush/tree size apply a
				minimum of 1 mL for each bush/tree.

See General Instructions page - for on-surface nozzle or spear attachment recommendations.

NON-FORESTRY APPLICATIONS SPOTGUN® ON GRID PATTERN

SITUATION/ CROP	WEEDS CONTROLLED	STATE	RATE	CRITICAL COMMENTS
Around agricultural	Acacia spp. such as: Brigalow (A. harpophylla)	Old, NSW Only	1 mL/spot	Seedlings or single stemmed trees
ouildings and in	Silver Wattle (A. dealbata)	ALL STATES	•	up to 1 m tall.**
pasture situations.	Currawang/Hickory (White wood) (A. doratoxylon)	Qld, NSW, Vic, WA Only	4 mL/spot	Bushes/trees 1 to 4 m tall or suckers.**
				Blackwood (A. melanoxylon) and Prickly Mimosa (A. verticillata) are not controlled at the recommended use rates.
	Eucalyptus spp. such as:-Poplar Box/Bimble Box (E. populnea)	Qld, NSW Only	1 mL/spot	Bushes/trees up to 1 m tall**
	Creswick Apple Box (Scent Bark) (E. aromaphloia) Grey Box/Gum-topped Box (E. moluccana) Longleaf Box (E. goniocalyx) White Box (E. albens)	NSW, Vic Only	4 mL/spot	Bushes/trees 1 to 7 m tall or suckers.**
	Coolibah (E. microtheca)	Old, NSW, SA, WA Only		
	Dawson Gum (E. cambageana)	Old Only		
	Mountain Grey Gum/Monkey Gum (E. cypellocarpa)	NSW, Vic, SA Only		
	Blakely's Red Gum <i>(E. blakelyi)</i>	NSW, Vic Only		
	Red Ironbark/Mugga (E. sideroxylon)	Old, NSW, Vic Only		
	Congoo Mallee (E. dumosa)	NSW, Vic, SA Only		
	Yorrell (White Mallee) (E. glacilis) Pointed Mallee (Red Mallee) (E. socialis)	Now, vic, or only		
	Broadleaf Peppermint (E. dives) Narrowleaf Peppermint (E. radiata)	NSW, Vic Only		
	Brown Stringybark (E. baxteri)	Vic, SA Only		
	Messmate Stringybark (E. obliqua) Red Stringybark (E. macrorhyncha)	NSW, Vic, SA Only		
	White Stringybark (E. globoidea)	NSW, Vic Only		
	Bitterbark/Quinine Tree (Alstonia constricta)	Qld, NSW Only	1 mL/spot	Bushes/trees up to 1 m tall**
	White Cypress Pine (Callitris columellaris)	ALL STATES		
	Monterey Cypress (Cupressus macrocarpa)	Vic Only	4 mL/spot	Bushes/trees 1 to 3 m tall**
	Dogwood/Common Cassinia/ Dollybush (Cassinia aculeata)	NSW, Vic, SA, TAS Only	·	
	False Sandalwood/Budda (Eremophila mitchellii)	Qld, NSW Only		
	Whitewood (Atalaya hemiglauca)	Qld, NSW, SA, WA Only		
	African Boxthorn (Lycium ferocissimum)	ALL STATES		
	Yellow-wood (Terminalia oblongata)	Qld Only		
	Rubber vine (Cryptostegia grandiflora)	Qld Only	1 mL/spot	Bushes up to 1 m tall**
			4 mL/spot	Bushes 1 to 2 m tall
				Deep rooted bushes may require re-treatment if at two years they are still partially green.**
	Tree of Heaven (Tailanthus altissima)	NSW, Vic, WA Only	2 mL/spot	Bushes/trees up to 3 m tall
				Apply spots on a 1 x 1 m grid pattern.**
	Parkinsonia (Parkinsonia aculeata)	Old, NSW, WA Only	1 mL/spot	Bushes/trees up to 1 m tall**
			4 mL/spot	Bushes/trees 1 to 5m tall**
	Broadleaf Teatree (Melaleuca virdiflora)	Old Only	2 mL/spot	Bushes up to 1 to 3 m tall**
				Apply spots on a 2 x 2 m grid pattern

See General Instructions page - for on-surface nozzle or spear attachment recommendations.

NON-FORESTRY APPLICATIONS GROUND APPLICATION

SITUATION/CROP	WEEDS CONTROLLED	STATE	RATE/HA		CRITICAL COMMENTS
Around agricultural buildings.	ANNUAL WEEDS Summer grass, Barnyard grass, Love grass, Green	ALL STATES	13 to 18 L		Use the higher rates on heavy soils and soils high in organic
	amaranth, Asthma plant, Common sida, Common sow- thistle, Wild oats, Soft brome, Great brome, Medics, Fleabanes, Paterson's curse (Salvation Jane),			_	matter or carbon; on light soils where rainfall is heavy or on dense established stands of hard
	Blackberry nightshade			Foliar	to kill species such as paspalum,
	PERENNIAL WEEDS:	Old, NSW, WA Only	18 to 54 L	_	couch grass (Cynodon dactylon).
	Docks, Creeping buttercup, Ribwort (plantain), Couch grass (Cynodon dactylon), Paspalum, Nutgrass, Kikuyu, Artichoke thistle, Rhodes grass, Chicory, Flatweeds	Vic, SA, TAS Only	22 to 43 L	Spray Appli	nut grass and kikuyu.
	Parthenium hysterosphorus	Old, NSW Only	3.5 L (Large areas)	ications	
			7 mL/10 L/20 m ²	S	
			(Small areas)		
	Spiny rush (Juncus acutus)	Vic Only	360 to 540 mL/100 L		Gives complete eradication of mature plants only. Seedling
					plants should be controlled for up to 6 months.

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

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