

DuPont[™] **Velpar**[®] **DF**[®]

herbicide

Technical Information

Active Constituent: 750 g/kg HEXAZINONE

Pack Sizes: 10 kg

GROUP

• HERBICIDE

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

For the control of certain sedges, perennial grasses, broadleaf and woody weeds in Pinus radiata forests, and industrial weed control situations.

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 OR GROUND 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

Harmful if swallowed. Will damage eyes. Will irritate the skin. Avoid contact with eyes and skin. **DO NOT** inhale dust. When using the product, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, goggles and contaminated clothing.

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 the Material Safety Data Sheet.

GENERAL INSTRUCTIONS

DuPont Velpar® DF® is an effective foliar contact and soil active residual herbicide. Use sufficient water for thorough uniform coverage. For best foliar and residual control, apply as a postemergent spray during the period of active plant growth and when the air temperatures are 25° C 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 25° C 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, i.e. use one-third the overall rate when treating one-third of the area.

DO NOT apply DuPont Velpar® DF® during periods of intense rainfall, when wind speed exceeds 30 kph (for ground application) or when wind speed exceeds 20 kph (for aerial application).

On slopes of 20 % to 30 % apply DuPont Velpar $^{\circ}$ DF $^{\circ}$ by strip or spot application ONLY. On slopes greater than 30 % apply by spot application ONLY.

RESISTANT WEEDS WARNING

GROUP C HERBICIDE

DuPont Velpar® DF® herbicide is a member of the Triazines group of herbicides.. DuPont Velpar® DF® has the Inhibitors of photosynthesis at photosystem II mode-of-action. For weed resistance management DuPont Velpar® DF® is a Group C herbicide.

Some naturally-occurring weed biotypes resistant to DuPont Velpar® DF® and other Inhibitors of photosynthesis at photosystem II herbicides may exist through 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 DuPont Velpar® DF® or other Inhibitors of photosynthesis at photosystem II 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 DuPont Velpar $^{\circ}$ DF $^{\circ}$ to control resistant weeds.

Large numbers of healthy surviving weeds can be an indication that resistance is developing. Efforts should be made to prevent seed set of the survivors.

DO NOT make more than one application of an Inhibitor of photosynthesis at photosystem II herbicide in the same season.

If the user suspects that an Inhibitor of photosynthesis at photosystem II resistant weed is present, DuPont Velpar® DF® or other Inhibitors of photosynthesis at photosystem II 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.

Equipment and Application

DuPont DuPont Velpar® DF® Herbicide is a dry flowable formulation. The product is mixed with water and applied at recommended rates with either ground or aerial equipment (dependent on use pattern).

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. THE MATERIAL MUST BE KEPT IN SUSPENSION AT ALL TIMES BY CONTINUOUS AGITATION. To prevent nozzle blockage, strainer and nozzle screens should be 50 mesh or coarser.

Pinus radiata

Ground Application – Apply in 100 to 400 L/ha with a properly calibrated boom.

Forestry Spotgun – see Directions for Use – Critical comments Aerial Application · Apply a minimum of 20 L water for every 1 kg of product used, eg. 5 kg in 100 L of water per hectare.

Use a surfactant/wetting agent for pre-planting applications only, by either ground or aerial equipment. **DO NOT** add a surfactant if the spray is to be applied over the top of Pinus radiata trees.

A non-ionic surfactant/wetting agent (such as BS 1000) may be added at the rate of $250 \cdot 500$ mL/100 L of spray (for a surfactant containing 100 % active constituent) for improved wetting.

Industrial weed control

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

A non-ionic surfactant/wetting agent (such as BS 1000) may be added at the rate of $250 \cdot 500$ mL/100 L of spray (for a surfactant containing 100 % active constituent) for improved wetting.

Crop Safety

Because death or injury to trees may result, **DO NOT** apply after planting in the following situations:

- a) On trees which show poor vigour due to disease, or environmental factors such as drought, moisture stress or waterlogging;
- b) On poorly drained soils;
- c) On gravelly or rocky soils, and exposed subsoils.

Equipment Cleanup

Thoroughly clean all traces of DuPont Velpar® DF® Herbicide from application equipment immediately after use. Failure to remove residues may result in damage to sensitive plants in subsequent treated areas.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

The product may kill many trees and other desirable plants if not correctly applied.

DO NOT apply on or near desirable trees or other plants, 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 roots of desirable trees or plants may extend

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

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

PROTECTION OF WILDLIFE, FISH, CRUSTACEA AND ENVIRONMENT

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

DO NOT apply within 25 m of a recognised waterway, or further if native riverbank vegetation may be damaged (see Protection of Native and other Non-target Plants).

PROTECTION OF LIVESTOCK

Keep stock away from treated areas.

STORAGE AND DISPOSAL

Store in the closed, original container in a dry, well-ventilated area, as cool as possible out of direct sunlight. **DO NOT** store or expose product to wet conditions.

Keep from contact with fertilisers, fungicides and seeds.

Single rinse before disposal. Add rinsings to spray tank. **DO NOT** dispose of undiluted chemicals on-site. 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, 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 to the purchase price paid therefor.

APVMA Approval number: 48481/01

DIRECTIONS FOR USE

GROUND AND AERIAL APPLICATION

Pinus radiata plantations

SITUATION/CROP	WEEDS CONTROLLED	STATE	RATE/ha		CRITICAL COMMENTS
Pre- planting	ANNUALS:	Qld, NSW,	2.5 kg		Apply any time from March through to
SITE PREPARATIONS	Flatweeds, Rye grasses, Clovers	ACT, Vic,			July. It is recommended to delay
Pasture Sites	HARD-TO-KILL PERENNIALS:	Tas, WA	3.5 - 5 kg		planting until planting lines become
	Wallaby Grass, Serrated Tussock, Sorrel,	Only			clearly visible, i.e. when effects of the
	Dandelion, Kangaroo Grass (Suppression Only)				product are evident.
Native Woodland, Heath & Second	WOODY & HARD-TO-KILL WEEDS:		5 kg		Machine planting is not recommended,
Rotation Sites -	Bracken, Varnish Acacia (Acacia verniciflua),				as soil disturbance will reduce the
long term control	Sunshine Acacia (Acacia botrycephala),				residual activity.
	Silver Wattle (Acacia dealbata),				
	Hop Goodenia <i>(Goodenia ovata)</i> ,				
	Common Cassinia			_	
	(Dogwood Vic only) (Cassinia aculeata)			Foliar	
Post-planting	ANNUALS:	NSW, ACT,	2 kg + 8 L flowable	ar	Apply during July, August or
TREE RELEASE APPLICATION.	See: "Pre-planting SITE PREPARATIONS -	Vic, Tas,	Atrazine or	Spray	September. Allow 8 weeks after
	Pasture Sites"	SA, WA	5 kg Atrazine	ray	transplanting before treatment.
		Only	Wettable Powder	Ā	See below
	HARD-TO-KILL PERENNIALS:			물	
	See: "Pre-planting SITE PREPARATIONS			i.	Avoid use on <i>Pinus radiata</i> suffering
	Pasture Sites"			Applications	from stress (such as drought or water
				ns	logging). Avoid use on shale soils and
					exposed subsoils.
Pasture Sites	ANNUAL AND PERENNIAL WEEDS:	Qld, NSW,	3.5 - 5 kg		Apply during August, September,
i dature ortea	See: "Pre-planting SITE PREPARATIONS -	ACT, Vic,	0.5 ° 5 kg		October. Allow 8 weeks after
	Pasture Sites"	Tas, WA			transplanting before treatment.
Native Woodland Heath & Second	WOODY & HARD -TO-KILL- WEEDS:	Only	5 kg	1	* DO NOT apply
Rotation Sites- long term control	See: "Pre-planting SITE PREPARATIONS -	,	O Ky		surfactant/wetting agent when
notation of too long to in control	Native Woodland etc."				spraying over <i>Pinus radiata trees</i> .
Loamy Sands & Sandy Soils	Sorrel, Yorkshire Fog Grass, Annual Ryegrass	SA, Only	3.5 kg	1	Apply during August or September,
,	, , , , , , , , , , , , , , , , , , , ,				October. Allow 8 weeks after
					transplanting before treatment. See
					above*.

FORESTRY SPOTGUN®

SITUATION/CROP	WEEDS CONTROLLED	STATE	RATE	CRITICAL COMMENTS
Post-Planting	ANNUALS	Old, NSW,	6 or 12 mL	Mix 1 kg DuPont Velpar® DF® with
TREE RELEASE APPLICATIONS	Brome Grass, Capeweed, Chickweed, Clovers,	ACT, Vic,	of spray solution/	30 L water and apply amount shown/pine.
Pasture sites And Native woodland, heath and	Flatweeds, Rye grasses	Tas, WA Only	pine	Use the higher rates of DuPont Velpar® DF®: • when weed pressure is heavy. • when grasses are the major problem. • for longer term weed control and greater pine growth responses.
second rotation sites	HARD TO KILL PERENNIALS: Dandelion, Docks, Paspalum, Ribwort/Plantain, Serrated Tussock, Snow Grass, Sorrel, Wallaby Grass, Yorkshire Fog Grass, Kangaroo Grass (Suppression Only).	_	10 or 12 mL of spray solution/ pine	Hold Forestry Spotgun® (fitted with 120° solid cone nozzle) over the pine (slightly off centre to the central leader) with the nozzle tip 50 cm above the ground when making the application.
				Apply 1 – 4 months after pines have been transplanted into plantation.

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INDUSTRIAL WEED CONTROL APPLICATIONS GROUND APPLICATION

SITUATION/CROP	WEEDS CONTROLLED	STATE	RATE/ha		CRITICAL COMMENTS
Commercial and industrial areas, rights of way, around agricultural buildings.	ANNUAL WEEDS Summer Grass, Barnyard Grass, Love grass, Green Amaranth, Asthma Plant, Common Sida, Common Sow-thistle, Wild Oats, Soft Brome, Great Brome, Medics, Fleabanes, Paterson's Curse (Salvation Jane), Blackberry Nightshade	ALL STATES	4 - 6 kg	Folia	Use the higher rates on heavy soils and soils high in organic matter or carbon; on light soils where rainfall is heavy or on dense established stands of hard to kill species such as paspalum, couch grass (Cynodon dactylon), nut grass and kikuyu.
	PERENNIAL WEEDS: Docks, Creeping Buttercup, Ribwort (plantain), Couch Grass (Cynodon dactylon),	Qld, NSW, ACT, WA Only	6 - 8 kg	Foliar Spray Applications	
	Paspalum, Nutgrass, Kikuyu, Artichoke Thistle, Rhodes Grass, Chicory, Flatweeds	Vic, SA, TAS Only	8 kg	olicatio	
	Parthenium hysterosphorus	Old, NSW, ACT Only	1 kg (Large areas) 2 g/10 L/20 m ² (Small areas)	IIS	
	Spiny Rush (Juncus acutus)	Vic Only	120 - 180 g/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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