

CAUTION

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

GENEREX HEXAZINONE HERBICIDE

ACTIVE CONSTITUENT: 250g/L HEXAZINONE



A herbicide for the control of certain broadleaf weeds, perennial and annual grasses, woody weeds in *Pinus radiata* plantations, pasture situations and commercial and industrial areas and rights of way.

IMPORTANT: READ THE ATTACHED LEAFLET BEFORE USING THIS PRODUCT.

CONTENTS: 1L, 5L, 10L, 20L, 200L

GENEREX AUSTRALIA PTY LTD

Level 12, Gateway 1 Macquarie Place Sydney NSW 2000 TEL: 02 99557799

A C N: 063 490 120

NOTICE (NSW) ONLY

With the exception of regrowth less than five years old and under 3 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.

19th April 2001 Page 1 of 13

STORAGE AND DISPOSAL

Store in the closed, original container in a dry, well ventilated area, as cool as possible, but out of direct sunlight.

Do not store at temperatures below 0^{0} C, as product will freeze. Do not allow product to be stored near areas where sparks or naked flame could be present as product is flammable.

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 or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500mm 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.

SAFETY DIRECTIONS

Will irritate the eyes and skin. Avoid contact with the eyes and skin. Do not inhale spray mist. When opening the container, preparing the spray and using the prepared spray, wear elbow length PVC gloves and face shield or goggles. If product on skin, immediately wash the 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 (TEL 131126). If in eyes, hold eyes open, flood with water for at least 15 minutes and see a Doctor.

MATERIAL SAFETY DATA SHEET

For further information refer to MATERIAL SAFETY DATA SHEET which is available from the supplier.

TERMS OF SALE.

Generex Australia Pty Ltd. ("Generex") will not be held liable for any loss, injury or damage, indirect or consequential, arising from the sale, supply use or application of this product. The product is not to be used for any purpose nor in any way contrary to label instructions.

NRA Approval No: 47621/0401

Batch No:

Date of Manufacture:

19th April 2001 Page 2 of 13

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GROUP C HERBICIDE

DIRECTIONS FOR USE

This Leaflet is part of the Label.

NRA APPROVAL NO: 47621/0401

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19th April 2001 Page 3 of 13

DIRECTIONS FOR USE APPLICATION TECHNIQUE: BY GROUND AND AERIAL EQUIPMENT

CROP and	WEEDS	STATE	RATE/ha.	CRITICAL COMMENTS
SITUATION	CONTROLLED			
PINUS RADIATA PRE- PLANTING, SITE PREPARATION on PASTURE SITES.	Annuals:- Clovers (Trifolium spp.) Flatweeds (Hypochoeris spp.) Ryegrass (Lolium rigidum) Perennials:- Dandelion	Qld., N.S.W., ACT, Vic., Tas., & W.A. only	7 litres.	All PRE-PLANTING situations Apply from March-July Plant pines when yellowing of sprayed areas becomes visible. Avoid machine planting to ensure good residual activity of the product.
GILES.	(Hypochaeris glabra) Kangaroo grass (Themeda australis) Serrated tussock (Nassella trichotoma) Wallaby grass (Danthonia spp.)			
PINUS RADIATA	Woody Weeds and Difficult-to-kill Weeds.		15 litres	
PRE-PLANTING, SITE PREPARATION. on NATIVE WOODLAND, HEATH and SECOND ROTATION SITES.	Bracken (Pteridium esculentum) Cassinia (common) (Cassinia aculeta) Hop Goodenia (Goodenia ovata) Silver Wattle (Acacia dealbata) Sunshine acacia (Acacia botrycephaia) Varnish acacia (Acacia verniciflua)			

19th April 2001 Page 4 of 13

CROP and	WEEDS	STATE	RATE/ha.	CRITICAL COMMENTS
SITUATION	CONTROLLED			
PINUS RADIATA POST- PLANTING, TREE RELEASE. on PASTURE SITES.	ANNUAL and PERENNIAL WEEDS (as listed above in the SITE PREPARATION Section of this Directions for Use Table.)	Qld., N.S.W., ACT, Vic., Tas., & W.A. only	11-15 litres.	All POST-PLANTING situations Apply from July-September Wait approximately ONE month after transplanting young pines before spraying. Do Not apply surfactant/ wetting agent when spraying over <i>Pinus radiata</i> .
PINUS RADIATA POST- PLANTING, TREE RELEASE. on NATIVE WOODLAND, HEATH and SECOND ROTATION SITES.	Woody Weeds and Difficult-to-kill Weeds. (as listed above in the SITE PREPARATION Section of this Directions for Use Table.)		15 litres	
POST- PLANTING, TREE RELEASE. on SANDY LOAMS and SANDY SOILS	Annual Ryegrass (Lolium rigidum) Sorrel (Rumex acetosella) Yorkshire Fog (Holcus lanatus)	S.A., only.	10 litres	 Apply from Aug - Sept. Wait approximately TWO months after transplanting young pines before spraying. Do Not apply surfactant/ wetting agent when spraying over <i>Pinus radiata</i>.
POST- PLANTING, TREE RELEASE.	ANNUAL and PERENNIAL WEEDS (as listed above in the SITE PREPARATION Section of this Directions for Use Table.)	N.S.W., ACT, Vic., Tas., S.A. & W.A. only.	6 litres + 8 litres of flowable Atrazine or 5 kg of Atrazine Wettable Powder.	 To ensure reliable results, avoid applying to <i>Pinus radiata</i> affected by stress, caused by waterlogging, drought etc. Avoid applying on shale soils and exposed subsoils. Do Not apply surfactant/ wetting agent when spraying over <i>Pinus radiata</i>. Apply from Jul- Sept. Wait approximately TWO months after transplanting young pines before spraying.

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

19th April 2001 Page 5 of 13

GENERAL INSTRUCTIONS

FOR PINUS RADIATA FORESTRY SITUATIONS ONLY

USE OF SURFACTANTS/WETTING AGENTS.

<u>DO NOT</u> add a surfacant/wetting agent when applying by ground or air over *Pinus radiata* trees. Use a surfactant/wetting agent for directed foliar applications to unwanted species. Add wetting agent/surfactant where appropriate at the rate of 250-500 mL/100 litres of non ionic surfactant containing 100% active constituent. Adjust rates according to the active constituent level in the product.

SAFETY TO PINUS RADIATA PLANTATIONS

Young pines may be killed or injured if post planting sprays are carried out in situations where:

- 1. The soil is gravel/rocky and subsoils exposed.
- 2. The young pines are under stress due to some environmental factor, such as drought, moisture stress or waterlogging.
- 3. Soils that are poorly drained.

SPRAY TANK PREPARATION

With the agitator engaged:

- 1. Partially fill the tank with water.
- 2. Add correct amount of product for the area to be sprayed
- 3. Top up the tank with water.

Strainer and nozzle screens of 50 mesh or coarser should be used and the agitator kept running while spraying.

APPLICATION EQUIPMENT

Ground Application: Use 100-400 litres per sprayed hectare. The denser the target species, the higher the water volume. Ensure spray overlap occurs above target weeds to prevent strips of uncontrolled weeds occurring.

Hand held Equipment Application: Use 2000-4000 litres per sprayed hectare.

Aerial Application: Use a minimum of 5 litres of water for each litre of product recommended in the DIRECTIONS FOR USE Table

SPRAYER CLEAN UP

After use, clean all spray equipment by thoroughly washing with water in order to avoid corrosion to tanks, lines and nozzles.

Aircraft used in application should be thoroughly washed with particular attention to wheels and landing gear.

Ensure drainage of water, used in clean up operation, is discharged to areas that will not cause damage to desirable species either by direct contact or root uptake via seepage into soil.

19th April 2001 Page 6 of 13

DIRECTIONS FOR USE APPLICATION TECHNIQUE: GROUND APPLICATION

SITUATIONS	WEEDS	STATE	RATE/ha.	CRITICAL COMMENTS
	CONTROLLED			
Commercial & Industrial areas, Rights of Way, around Agricultural Buildings & Pasture situations.		All States	13-18 litres	ALL WEEDS Apply the higher rates if the following conditions are present: • Soil type is heavy and organic matter is high. • There are dense stands of hard-to-kill species, eg. perennials. • Soil type is light and subject to washing away by heavy rains. DO NOT apply if desirable plants are in close proximity to the target species, as root uptake may cause injury or death.
	(Sonchus oleraceus) Wild Oats (Avena spp.)			
	Perrenial Weeds:- (as per the list	Qld., N.S.W., ACT, W.A., only	18-54 litres	-
	below).	Vic., S.A., Tas., only	22-43 litres	
	Artichoke Thistle (Cynara cardunculus)			
	Couch grass (Cynodon dactylon) Chicory			
	(Cichorium intybus)			
	Docks (Rumex obtusifolius)			
	Flatweed (Hypochoeris radicata)			
	Kikuyu (Pennisetum clandestinum)			
	Nutgrass (Cyperus rotundus)			
	Paspalum (Paspalum dilitatum)			
	Rhodes grass (Chloris gayana)			
	Spiny Rush (Juncus acutus)	Vic. only	360-540 mL per 100litres of water.	Controls mature plants. Controls seedlings for about 6 months.

19th April 2001 Page 7 of 13

DIRECTIONS FOR USE

APPLICATION TECHNIQUE: STEM INJECTION

SITUATION	WEEDS CONTROLLED	STATE	RATE	CRITICAL COMMENTS
Commercial & Industrial areas, Rights of Way, around Agricultural	Eucalypt spp. such as:- Bloodwood (red) (E.dichromophloia)	Qld. only	1 mL/cut each cut 15cm of circumference, centre to centre of cuts or 2 mL/cut each 30cm of circumference,	ALL TREES -Apply at waist heightApply a minimum of 2 mL to each tree.
Buildings & Pasture situations.	Brown Box (E. microcarpa)	N.S.W, ACT & Qld. only	centre to centre of cuts. 0.5 mL/cut at 15cm, centre to centre of cuts or 1mL/cut at 30cm, centre to centre of cuts.	
	Coolibah (E.microtheca)	N.S.W., ACT, Qld, W.A., S.A., only	1mL/cut each 15cm, centre to centre of cuts or 2mL/cut each 30cm, centre to centre of cuts.	
	Grey Topped Box/ Grey Gum (E.moluccana)	N.S.W, ACT. & VIC. only		
	Ironbark(silverleaf) (E. melanopholia)	N.S.W. ACT & Qld. only	0.5 mL/cut at 15cm, centre to centre of cuts or 1mL/cut at 30cm, centre to centre of cuts	
	Morton Bay Ash (E. tessellaris)	N.S.W, ACT & Qld. only	1 mL/ cut at 15cm, centre to centre of cuts or 2 mL/cut at 30cm, centre to centre of cuts.	
	Poplar Box (E.populenea)	N.S.W. ACT & Qld only	0.5mL/cut at 15 cm, centre to centre of cuts or 1mL/cut at 30cm, centre to centre of cuts.	
	Stringybark (red) (E.macrorhyncha)	N.S.W., ACT, Vic & S.A. only	1	

19th April 2001 Page 8 of 13

<u>DIRECTIONS FOR USE</u> APPLICATION TECHNIQUE: BY ON GROUND SPOT APPLICATION NEAR INDIVIDUAL BUSH/ TREE.

SITUATION	WEEDS CONTROLLED	STATE	RATE	CRITICAL COMMENTS
Commercial	Acacia spp,			ALL BUSHES & TREES
& Industrial	such as:-			Rates are for bushes/trees up to
areas,	Brigalow	Qld. N.S.W.	2 mL/ spot	1 metre in height only. Bushes/ trees above 1 metre will not be
Rights of	(A.harpophylla)	ACT only		
Way, around	Silver Wattle	All States		controlled. One spot for each individual tree/bush unless
Agricultural	(A.delbata)			otherwise stated. Place spot
Buildings &	Eucalypt spp. such as:-			between the base of the plant &
Pasture	Coolibah	S.A. ,W.A.,	2mL/spot	the dripline unless otherwise
situations.	(E.microtheca)	Qld., N.S.W.,	ZIIIL/spot	stated. The dripline is the line
	(E.microineca)	ACT only		between the extremity of foliage
	Dawson Gum	Qld. Only		and the ground.
	(E. cambageana)	Qia. Omy		
	(2. cambageana)			
	Gumtopped Box/, Grey Box (E.	N.S.W., ACT, Vic.		
	moluccana)	only		
	Ironbark(red)/ Mugga	Qld., N.S.W.,		
	(E. sideroxylon)	ACT, Vic., only		
	Poplar Box	Qld., N.S.W.		
	(E. populenea)	ACT only		
	Other species			
	such as:-			
	African Boxthorn	All States	4mL/spot	
	(Lycium			
	ferocissimum)		2.7/	
	Bitterbark/	All States	2mL/spot	
	Quinine Tree			
	(Alstonia constricta)			
	Blackberry	All States	4mL/spot	Place spot near base. Apply to single
	(Rubus spp.)	All States	4IIIL/spot	crowned bushes.
	(Ruous spp.)			Tasmania only: To preserve the fruit
				do not apply to bushes bearing near
				mature or mature fruit.
	False Sandalwood/ Budda	Qld., N.S.W.,	2mL/spot	
	(Eremophila mitchelli)	ACT only		
	7	011	2.7/	W 0
	Limebush	Qld. only	2mL/spot	Use 2 spots for each bush/tree.
	(Eremocitrus glauca)			
	Parkonsonia (<i>Parkonsonia</i>	Qld., N.S.W.,	4mL/spot	
	aculata)	ACT, W.A., only	4IIIL/spot	
-	acmun)	71C1, 11.71.,011ly		
	Rubbervine (Cryptostegia	Qld., only	2mL/spot	Apply spots to base of the plant.
	grandiflora)	Qran, only	Apply3 spots to	Retreatment maybe needed if
	0 · ····9·· · ·/		each bush or tree.	plants are still partially green
				after 2 years.
	Sweet Briar	N.S.W., ACT	4mL/spot	
	(Rosa rubiginosa)	Vic., Tas.,only		
	Teatree(Broadleaf)	N.S.W., ACT,	2mL/spot	
	(Melaleuca verdiflora)	Qld., only		
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19th April 2001 Page 9 of 13

SITUATION	WEEDS	STATE	RATE	CRITICAL COMMENTS
	CONTROLLED			
Commercial	Tree of Heaven	N.S.W., ACT,	4mL/spot	
& Industrial	(Ailanthus altissima)	Vic., W.A.,		
areas,		only		
Rights of				
Way,	Whitewood	Qld., N.S.W.,	2mL/spot	
around	(Atalaya hemiglauca)	ACT, S.A.,	-	
Agricultural		W.A., only		
Buildings &	Yellowwood	Qld., only	4mL/spot	
Pasture	(Terminalia oblongata)		•	
situations.				

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

GENERAL INSTRUCTIONS

<u>SITUATIONS WHERE PRODUCT IS USED BY GROUND SPRAY, STEM INJECTION</u> AND SPOT APPLICATIONS

1. Ground and Hand Applications.

- -The product is both foliar and root absorbed and will give residual soil activity.
- All rates in the DIRECTIONS FOR USE charts refer to SPRAYED hectare.
- Spray, to achieve best results, when plants are in an active growth phase.
- Visible symptoms and degree of effectiveness will vary with temperature, soil types, rainfall, soil moisture, stress level of plants.

USE OF SURFACTANTS/WETTING AGENTS.

Use a surfactant/wetting agent for directed foliar applications. Add wetting agent/surfactant where appropriate at the rate of 250-500 mL/100 litres of non-ionic surfactant containing 100% active constituent. Adjust rates according to the active constituent level in the product.

SPRAY TANK PREPARATION

With the agitator engaged:

- 1. Partially fill the tank with water.
- 2. Add correct amount of product for the area to be sprayed.
- 3. Top up the tank with water.

Strainer and nozzle screens of 50 mesh or coarser should be used and the agitator kept running while spraying.

APPLICATION EQUIPMENT INFORMATION

Ground Application: Use 100-400 litres per sprayed hectare. The denser the target species, the higher the water volume. Ensure spray overlap occurs above target weeds to prevent untreated strips appearing.

Hand Held Application: Use 2000-4000L/ha

SPRAYER CLEAN UP

After use, clean all spray equipment by thoroughly washing with water in order to avoid corrosion to tanks, lines and nozzles.

19th April 2001 Page 10 of 13

Ensure drainage of water, used in clean up operation, is discharged to areas that will not cause damage to desirable species either by direct contact or root uptake via seepage into soil.

2. Stem Injection Application

Application Equipment

- -Use a suitable injector that can calibrate low dosages and be placed in the cut.
- Ensure applications are made within a few seconds of making the cut to ensure maximum uptake into the sap stream.
- A narrow bladed axe of 5cm -7cm width should be used.
- Cuts should be made so as to penetrate the bark and cut into the sap stream layer beneath the bark.

Timing.

Timing is not critical but best results follow when trees in an active growth phase. Trees under stress from drought etc, are less susceptible.

Placement.

- Inject trees at around waist height
- For multi stemmed trees treat each stem as being an individual tree.

Refer to Critical Comments in Directions For Use Tables for more specific instructions.

3. SPOT APPLICATION

Application Equipment

The product can be applied by a suitable Gun which can apply a calibrated amount to the ground surface, using an on-surface nozzle or a spear attachment. The spear attachment is recommended on sloping ground to avoid product moving down the slope should rain follow application.

Timing

Timing is not critical but best results follow when trees are in an active growth phase and soil is moist at application or there is sufficient rainfall after treatment to promote root absorption by the target bush or trees. Trees under drought stress are less susceptible.

Placement

- -Place spots between the dripline and the base of the plant, as a general rule. Refer to Directions For Use for specific cases where this may not be so.
- -Spots should be placed either side of the bush if 2 spots are required, and evenly around the bush if more than 2 are required.
- If a spear attachment is used on sloping ground apply to uphill side of bush.
- If using on surface nozzle ensure the spot is applied to bare ground.
- If loose leaf matter, twigs, pasture etc, are present it may be better to penetrate this by using the spear attachment.

GENERAL INSTRUCTIONS FOR ALL SITUATIONS.

- -The product is both foliar and root absorbed and will give residual soil activity.
- For best foliar and residual control, apply during periods of active plant growth. Application when vegetation is dormant, semi-dormant, under moisture stress or during winter months may not be as effective.
- In temperate winter rainfall areas where temperatures are generally below 25^oC during periods of active growth, overall effect may be slower to appear. For best control of perennials, apply

19th April 2001 Page 11 of 13

- during the months of spring in these areas. In WA and SA apply only during April-August when adequate rainfall is expected.
- Sufficient moisture is required after treatment to promote root absorption by the weed species.
- DO NOT apply Generex Hexazinone Herbicide during periods of intense rainfall or under conditions which will cause drift or movement to non-target areas (ie windspeeds exceeding 30 kph for ground application or 20 kph for aerial application).
- On slopes of 20% to 30% apply Generex Hexazinone by strip, spot or stem injection application only. On slopes greater than 30% apply by spot or stem injection application only.
- The litres/ha. rates in the DIRECTIONS FOR USE Tables refer to SPRAYED hectare.
- Visible symptoms and degree of effectiveness will vary with temperature, soil types, rainfall, soil moisture, stress level of plants.

Resistant Weeds Warning

Generex Hexazinone Herbicide is a member of the Triazinones group of herbicides. Generex Hexazinone Herbicide has the inhibitors of photosynthesis at photosystem II mode of action. For weed resistant management Generex Hexazinone Herbicide is a Group C herbicide.

Some naturally-occurring weed biotypes resistant to Generex Hexazinone Herbicide and other inhibitors of photosynthesis at photosystem II 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 Generex Hexazinone Herbicide or any other inhibitors of photosynthesis at photosystem II mode of action.

Since the occurrence of resistance weeds is difficult to detect prior to use, Generex Australia Pty Ltd accepts no liability for any losses that may result from the failure of Generex Hexazinone Herbicide to control resistant weeds.

PROTECTION OF CROPS, NATIVE AND OTHER NON TARGET PLANTS

DO NOT use under weather conditions or from spraying equipment, that may cause drift onto nearby susceptible plants, adjacents crops, croplands or pastures

As desirable plants could be affected by root uptake ensure that any emptying, draining or flushing operations are not carried out in the vicinity of such plants.

PROTECTION OF LIVESTOCK.

DO NOT allow stock into areas sprayed from air or ground, however, stock do not need to be removed from areas where on ground spot or stem injection treatments are undertaken.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT.

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

STORAGE AND DISPOSAL

Store in the closed, original container in a dry, well ventilated area, as cool as possible, but out of direct sunlight.

Do not store at temperatures below 0^{0} C, as product will freeze. Do not allow product to be stored near areas where sparks or naked flame could be present as product is flammable.

Triple or (preferably) pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on-site. Break, crush, 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.

19th April 2001 Page 12 of 13

SAFETY DIRECTIONS

Will irritate the eyes and skin. Avoid contact with the eyes and skin. Do not inhale spray mist. When opening the container, preparing the spray and using the prepared spray, wear elbow length PVC gloves and face shield or goggles. If product or spray gets on skin, immediately wash the 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 (TEL 131126). If in eyes, hold eyes open, flood with water for at least 15 minutes and see a Doctor.

MATERIAL SAFETY DATA SHEET

For further information refer to MATERIAL SAFETY DATA SHEET which is available from the supplier.

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19th April 2001 Page 13 of 13