

POISON

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

MACSPRED®

HEXMAC® 750 SG HERBICIDE

ACTIVE CONSTITUENT: 750g/kg HEXAZINONE

GROUP C HERBICIDE

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

THIS LEAFLET IS PART OF THE LABEL

APVMA APPROVAL NO: 61923/1107

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.

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DIRECTIONS FOR USE
GROUND AND AERIAL APPLICATION (Foliar Spray Applications)
***Pinus radiata* plantations**

SITUATION	WEEDS CONTROLLED	STATE
Pre- planting SITE PREPARATIONS Pasture Sites	ANNUALS: Flatweeds, Rye grasses, Clovers	Qld, NSW, ACT, Vic, Tas, WA Only
	HARD-TO-KILL PERENNIALS: Wallaby Grass, Serrated Tussock, Sorrel, Dandelion, Kangaroo Grass (Suppression Only)	
Native Woodland, Heath & Second Rotation Sites - long term control	WOODY & HARD-TO-KILL WEEDS: Bracken, Varnish Acacia (<i>Acacia</i> <i>verniciiflua</i>), Sunshine Acacia (<i>Acacia botrycephala</i>), Silver Wattle (<i>Acacia dealbata</i>), Hop Goodenia (<i>Goodenia ovata</i>), Common Cassinia (Dogwood Vic only) (<i>Cassinia aculeata</i>)	
Post-planting TREE RELEASE APPLICATION	TREE RELEASE APPLICATION ANNUALS: See: "Pre-planting SITE PREPARATIONS - Pasture Sites" HARD-TO-KILL PERENNIALS: See: "Pre-planting SITE PREPARATIONS - Pasture Sites"	NSW, ACT, Vic, Tas, SA, WA Only

RATE/ha	CRITICAL COMMENTS
2.5 kg	Apply any time from March through to July. It is recommended to delay planting until planting lines become clearly visible, i.e. when effects of the product are evident.
3.5 - 5 kg	Machine planting is not recommended, as soil disturbance will reduce the residual activity. For best results on Woody and Hard to kill weeds, application should be made after weed emergence.
5 kg	Silver Wattle exceeding 1.5m – suppression only.
2 kg + or 5 kg Atrazine (900g/kg) wetable powder	Apply during July, August, September or October. Allow 8 weeks after Transplanting before treatment. See below Avoid use on <i>Pinus radiata</i> suffering from stress (such as drought or water logging) or when temperatures exceed 25°C. Avoid use on shale soils and exposed subsoils.

GROUND AND AERIAL APPLICATION (Foliar Spray Applications)***Pinus radiata* plantations**

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SITUATION	WEEDS CONTROLLED	STATE
Pasture Sites	ANNUAL AND PERENNIAL WEEDS: See: "Pre-planting SITE PREPARATIONS - Pasture Sites"	Qld, NSW, ACT, Vic, Tas, WA Only
Native Woodland Heath & Second Rotation Sites - long term control	WOODY & HARD -TO-KILL- WEEDS: See: "Pre-planting SITE PREPARATIONS - Native Woodland etc."	
Loamy Sands & Sandy Soils	Sorrel, Yorkshire Fog Grass, Annual Ryegrass	SA Only

RATE/ha	CRITICAL COMMENTS
3.5 - 5 kg	Apply during August, September, October. Allow 8 weeks after transplanting before treatment. * DO NOT apply surfactant/wetting agent when spraying over Pinus radiata trees.
5 kg	
3.5 kg	Apply during August or September, October. Allow 8 weeks after transplanting before treatment. See above*.

FORESTRY SPOTGUN

SITUATION	WEEDS CONTROLLED	STATE
Post-Planting TREE RELEASE APPLICATIONS Pasture sites And Native woodland, heath and second rotation sites	ANNUALS Brome Grass, Capeweed, Chickweed, Clovers, Flatweeds, Rye grasses	Qld, NSW, ACT, Vic, Tas, WA Only
	HARD TO KILL PERENNIALS: Dandelion, Docks, Paspalum, Ribwort/Plantain, Serrated Tussock, Snow Grass, Sorrel, Wallaby Grass, Yorkshire Fog Grass, Kangaroo Grass (Suppression Only).	

RATE/ha	CRITICAL COMMENTS
6 or 12 mL of spray solution/ pine	<p>Mix 1 kg Macspred Hexmac 750 SG with 30 L water and apply amount shown/pine.</p> <p>Use the higher rates of Macspred Hexmac 750SG:</p> <ul style="list-style-type: none">- when weed pressure is heavy.- when grasses are the major problem.- for longer term weed control and greater pine growth responses <p>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.</p> <p>Apply 1 – 4 months after pines have been transplanted into plantation.</p>
10 or 12 mL of spray solution/ pine	

INDUSTRIAL WEED CONTROL APPLICATIONS
GROUND APPLICATION (Foliar Spray Applications)

SITUATION	WEEDS CONTROLLED	STATE
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
	PERENNIAL WEEDS: Docks, Creeping Buttercup, Ribwort (plantain), Couch Grass (<i>Cynodon dactylon</i>),	Qld, NSW, ACT, WA Only
	Paspalum, Nutgrass, Kikuyu, Artichoke Thistle, Rhodes Grass, Chicory, Flatweeds	Vic, SA, TAS Only
	<i>Parthenium hysterophorus</i>	Qld, NSW, ACT Only
	Spiny Rush (<i>Juncus acutus</i>)	Vic Only

RATE/ha	CRITICAL COMMENTS
4 - 6 kg	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 (<i>Cynodon dactylon</i>), nut grass and kikuyu.
6 - 8 kg	
8 kg	
1 kg (Large areas) 2 g/10 L/20 m ² (Small areas)	
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.

GENERAL INSTRUCTIONS

Macspred Hexmac 750SG Herbicide 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 post-emergent 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 Macspred Hexmac 750SG Herbicide during periods of intense rainfall, when wind speed exceeds 30 kph (for ground application) or when wind speed exceeds 20 kph (for aerial application).

DO NOT broadcast apply this product where there is no vegetation or slash or on uncultivated areas or non mounded or bare ground on slopes.

RESISTANT WEEDS WARNING**GROUP C HERBICIDE**

Macspreed Hexmac 750SG Herbicide herbicide is a member of the Triazines group of herbicides. Macspreed Hexmac 750SG Herbicide has the Inhibitors of photosynthesis at photosystem II mode-of-action. For weed resistance management Macspreed Hexmac 750SG Herbicide is a Group C herbicide.

Some naturally-occurring weed biotypes resistant to Macspreed Hexmac 750SG Herbicide and other Group C 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 Macspreed Hexmac 750SG Herbicide or other Group C herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Macspreed accepts no liability for any losses that may result from the failure of Macspreed Hexmac 750SG Herbicide 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 a Group C resistant weed is present, Macspreed Hexmac 750SG Herbicide or other Group C 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 Macspreed representative.

EQUIPMENT AND APPLICATION

Macspred Hexmac 750SG 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 - 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 - 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 Macspred Hexmac 750SG 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, CRUSTACEANS 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 away 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.

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 Phone Australia 13 11 26. 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 the Material Safety Data Sheet which is available from the supplier.

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 Macspred or Seller are hereby excluded. Macspred 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 Macspred 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. Macspred's liability shall in all circumstances be limited to replacement of the product or a refund of the purchase price paid therefor.