### **POISON**

#### KEEP OUT OF REACH OF CHILDREN

#### READ SAFETY DIRECTIONS BEFORE OPENING OR USING

## TUSSOCK™

## **HERBICIDE**

ACTIVE CONSTITUENT: 745 g/L FLUPROPANATE present as the sodium salt



For the control of certain grasses as per the directions for use table.

#### IMPORTANT: READ THE ATTACHED LEAFLET BEFORE USING THIS PRODUCT

CONTENTS 1L, 5 L, 20 L

**Grow Choice Pty Ltd** 113 Fitzroy Street Tamworth NSW 2340 ACN 069 839 961

Phone: 02 67663979

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<sup>™</sup> Grow Choice Pty Ltd Trademark

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

**DO NOT** apply under weather conditions, or from spraying equipment, that may cause spray to drift onto nearby susceptible plants/crops, cropping lands or pastures.

#### PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

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

#### STORAGE AND DISPOSAL

Store in the closed original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight. 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

Avoid contact with eyes and skin. Do not inhale spray mist. When preparing the spray wear elbow-length PVC gloves and face shield or goggles. If product 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 gloves and face shield or goggles and contaminated clothing.

#### MATERIAL SAFETY DATA SHEET

For further hazard information refer to the Material Safety Data Sheet (MSDS) which is available form the supplier.

#### FIRST AID

If poisoning occurs contact a doctor or Poisons Information Centre (Phone Australia 131126). If skin contact occurs, remove contaminated clothing and wash skin thoroughly.

#### **TERMS OF SALE:**

Grow Choice Pty Ltd 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 or in any way contrary to label instructions.

APVMA APPROVAL NO: 51909/1L/1104, 51909/5L/1104, 51909/10L/1104

BATCH NO:

DATE OF MANUFACTURE

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#### THIS LEAFLET IS PART OF THE LABEL

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Directions for Use

Restraints

Do **NOT** apply this product to steeply sloping sites when applying high rates recommended for perennial grass control. Do **NOT** allow spray drift onto susceptible crops and ornamentals.

Do **NOT** spray near desirable trees.

Crop/ Situation				Rat	e			
	Weeds Controlled	States	Ground per ha	Ground per ha Air per Spot Spraying per 100L ha		al Comments		
Industrial use	Paspalum (Paspalum dilatatum) Kikuyu grass (Pennisetum clandestinum) Couch (Cynodon dactylon)	Tas., WA, SA and Vic.	9L	-	500mL	Apply to existing growth during November to February inclusive.  Apply the recommended rate of 'Tussock Herbicide' in 800-2000L of water per ha. Ensure that the spray completely wets all leaf surfaces.		
	African Feathergrass (Pennisetum macrourum)	Tas. , WA only,	9L	-	-	Spot spraying: spray thoroughly to ensure run-off.		
Pastures and non- crop situations	Parramatta grass	Qld, NSW, WA only	2L	2L	200mL	Apply December to February inclusive.	Application volumes: Pastures Aerial: 40-80L water per ha Ground Boom Spray: 150L water per ha Spot Spraying: NSW & Qld: 1000L/ha or for a 15L knapsack treat 150m².	
	Sporobolus sp. such as Giant Parramatta Grass (S. fertilis), Giant Rat's Tail Fescue (S. pyramidalis) and S. nataliensis	NSW only	1.5-2L	-	200mL	In Northern NSW apply from July to December inclusive, during the drier time of year. Use the higher rate for heavy infestations. To obtain better herbicide selectivity and less damage to desirable pasture species, apply when the pasture is dormant, semi-dormant. For example in NSW, the optimum application time is late winter and early spring. DO NOT apply in severe droughts or to weeds retarded by burning.		
	African love grass	NSW, WA only Vic. only	3L	-	300mL	Apply July to December.  Apply July to December inclusive. All other Critical C		
	Rats tail grasses	Qld, WA only	2L	-	200mL	Spray to run-off.	(	
Urban open space, woodlands,	Needle grasses (Nasella spp)	NSW, ACT, SA, WA only	1.5 - 3L	-	200mL + 150mL Biochoice 360 Herbicide	Apply tank mix to actively growing plants in Spring and autumn. Apply once per year.  Calibrate spray equipment to apply 1000L water per hectare. Apply to actively growing and stress free plants. Control will take 3-12 months depending on weather conditions and senescence of plant foliage. High rates will kill native grasses. Apply once per year  Avoid use in channels or drains. Do NOT re-seed treated areas until at least 100mm of leaching rain has fallen.		
roadsides, nature reserves and pastures					100mL-300mL			
Pastures and non- crop situations	Coolatai Grass (Small patchy infestations) (Hyparrhenia spp)	NSW only	-	-	300mL per 100L water	Apply in winter and spring between the months of Jul applicators. Apply herbicide solution to Coolatai grass		

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Crop/Situation	Weeds controlled	States	Rate			·	Critical Comments		
			Ground per ha	Air	Wiper	Spot spraying per 100L			
Pastures and non- crop situations	Serrated Tussock	Vi,c, Tas. , WA only	2L	2L	-	200mL	Apply during November to February inclusive. Graze to reduce cover of desirable species before spraying. Re-seeding: Desirable pasture species such as phalaris, cocksfoot, ryegrass, red and white clovers, subterranean clovers and lucerne must not be sown until at least 100mm of leaching rain has fallen. If drought conditions prevail defer sowing until next season. Spot Spraying: Spray to run-off at anytime from spring through to autumn but observe above precautions on re-seeding.	Application volumes: Pastures Aerial: 40-80L water per ha Ground Boom Spray: 150L water per ha Spot Spraying: NSW & Qld: 1000L/ha or for a 15L knapsack treat	
	Serrated Tussock	Qld only	2L	2L	-	200mL	Apply September to May inclusive. (See Note below)		
Pasture – broadacre treatment	Serrated Tussock	NSW, ACT, Vic, WA only	1.5-2L	1.5-2L	1:20 via a rotating wiper		Apply September to March and June to August inclusive	Aerial application: apply in a volume of 35-80L of water. In more difficult country, use higher rates of water, anti-drift additives and larger droplets.  Ground application: apply in a volume of 80-150L. Use the lower rate on slate, shale and granite soils, use the higher rate on basalt soils. Rotating Wiper: graze heavily prior to treatment to ensure height differential between pasture and serrated tussock. In dense serrated tussock, stock may not graze heavily and some pasture damage may result. Apply as single or double pass.  Winter application: avoid application in very dry winters.	
treatment -to remove seedlings from improved pasture Pasture - broadacre treatment - spray topping Pasture - spot			0.5-2L	-	-		Apply September to February inclusive	Seedlings of serrated tussock are susceptible to shading and low rates of flupropanate. In all situations, use conservative stocking rates and fertilise to maintain a vigourous pasture after spraying.  Use the lower rate for slate and granite soils. Serrated Tussock plants must be less than 10cm high, and have less than 80 leaves. Apply September to November before pastures "bolt" in the spring flush, or December to February when improved species are dormant.	
treatment - to destroy serrated tussock Pasture - spot treatment - to destroy serrated tussock and prevent seeding			1.5-2L + 0.6-1.25L Biochoice 360 Herbicide + wetting agent	1.5-2L + 0.6-1.25L Biochoice 360 Herbicide + wetting agent	-		Apply September to November inclusive	If applied after August, serrated tussock is less likely to set viable seed. To prevent seeding, the use of a knockdown spray may be applicable where it is acceptable to damage associated pasture species. Spray to wet plant – approximately 1000L of prepared solution per hectare. Rotating wiper – Apply as a double pass 2 to 8 weeks before seed heads begin to emerge. Add a wetting agent at the recommended label rates. Will NOT kill serrated tussock but will reduce seeding. Graze heavily prior to treatment to ensure height differential between pasture and serrated tussock. In dense serrated tussock, stock may not graze heavily and some pasture damage will occur.	
			-	-	-	150-200mL	Can be applied all year round	Calibrate spray equipment to apply to 1000L water per hectare. The addition of a wetter to the glyphosate use pattern may prove beneficial. Lower rates of may be used on slate and granite soils. Use a dye marker. Area may need re-treatment in subsequent years. Flupropanate may take several months to affect plants. Seed set may be prevented by the addition of a knockdown herbicide, such as Glyphosate.	
			-	-	-	150-200mL + 120mL Biochoice 360 Herbicide	Apply September to November inclusive	To prevent seed set, spray before seedheads begin to emerge. See critical comments for Pasture, "spot treatment to destroy serrated tussock" above.	

Crop/ Situation	Weeds Controlled	States	Rate			Critical Comments
			Per ha	Per 100L	Knapsack (15L)	
Non-crop situations	Paspalum	Old, NSW, WA only	9L	500mL	75mL	For optimum results apply during active growth, preferably from November to April. Apply in 800-2000L water
· · · · · · · · · · · · · · · · · · ·	Couch Johnson grass	(1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	12-22L	1L	200mL	per ha. Spray must completely wet all surfaces. The addition of wetting agent is recommended. Johnson grass: Spray when actively growing and not less than 30-50cm high. Use 12L in winter rainfall areas when rainfall is
	Kikuyu grass	Qld, WA only	9L	500mL	75mL	below 80cm per annum. Use 18-22L in summer rainfall areas or where rainfall exceeds 80cm per annum. Follow
	Columbus grass	NSW, WA only	12-22L	1L	200mL	up spraying may be required in following season. <b>Spot Spraying</b> : Spray thoroughly to run-off with the recommended dilution rates.

Note: The optimum timing of 'TUSSOCK HERBICIDE' application to avoid damage to desirable pasture species and/or to allow 'TUSSOCK HERBICIDE' residues to be leached from the soil prior to autumn re-seeding is the period November to February inclusive. Precautions on re-seeding and protection of pasture legumes must be observed.

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

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AREAS RECEIVING BLANKET TREATMENT (THAT IS TREATMENT OTHER THAN SPOT SPRAYING) ARE NOT TO BE GRAZED OR CUT FOR STOCK FOOD FOR AT LEAST 4 MONTHS AFTER SPRAYING.

AREAS RECEIVING SPOT SPRAY TREATMENT ARE NOT TO BE GRAZED OR CUT FOR STOCK FOOD FOR AT LEAST 14 DAYS AFTER SPRAYING. STOCK IS NOT TO BE GRAZED IN 'TUSSOCK HERBICIDE' TREATED AREAS FOR AT LEAST 14 DAYS PRIOR TO SLAUGHTER. LACTATING COWS OR GOATS MUST NOT BE GRAZED IN 'TUSSOCK HERBICIDE' TREATED AREAS.

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#### GENERAL INSTRUCTIONS

#### **Resistant Weeds Warning**

#### **GROUP** J HERBICIDE

TUSSOCK HERBICIDE is a member of the alkanoic acids group of herbicides. TUSSOCK HERBICIDE has the inhibitor of fat synthesis mode of action. For weed resistance management TUSSOCK HERBICIDE is a Group J Herbicide.

Some naturally occurring weed biotypes resistant to TUSSOCK HERBICIDE and other inhibitors of fat synthesis mode of action 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 TUSSOCK HERBICIDE or any other inhibitors of fat synthesis mode of action herbicides.

Since the occurrence of resistant weeds is difficult to detect prior to use, Grow Choice Pty Ltd accepts no liability for any losses that may result from the failure of TUSSOCK HERBICIDE to control resistant weeds.

#### **Important**

- This product is very slow acting and control of existing growth will take 3-12 months depending on weather conditions and senescence of plant foliage.
- The actual length of satisfactory residual control will depend on soil type and rainfall until regeneration occurs from grass seed or surviving rhizomes.
- TUSSOCK HERBICIDE is liable to leaching and movement in the soil under heavy rainfall or irrigation, and dry conditions favour its persistence in the soil.
- Avoid use in channels and drains and where roots of desirable plants may extend; and in other situations where desirable plants grow close to the treated area.
- Control of grasses growing in shaded conditions may be reduced.
- Subterranean clover and other annual legumes may be damaged by this product if exposed to the spray or if they
  germinate before product residues have dissipated form the soil. Do not treat pasture land with this product more than
  once per year.

#### Mixing

This product is highly soluble in water and the required amount can be added direct to the spray tank while stirring or with the agitator running. When used in mixtures with dispersible powders, first make a slurry of the powder in a small quantity of water, add this to the half filled spray tank with the agitator running, and then add the required quantity of product and continue filling until the spray tank is full. Good agitation must be maintained during the spraying operation.

#### Wetting agent

Addition of 100mL of a non-ionic surfactant (600 g/L) per 100 litres of spray is recommended.

#### Compatibility

This product may be mixed with Glyphosate to improve knockdown of existing vegetation.

#### **Application**

Boom spray equipment should be carefully calibrated to deliver the required volume of spray and checked to see that the nozzles are delivering a uniform spray pattern.

#### **Paddock Preparation**

Graze to reduce cover of desirable species for spraying.

#### Re-seeding

Desirable pasture species such as phalaris, cocksfoot, ryegrass, red and white clovers, subterranean clovers and lucerne may be sown after at least 100mm of leaching rain has fallen. If drought conditions prevail defer sowing until next season.

#### Clean up

Equipment should be cleaned after use.

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

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#### PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

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

#### STORAGE AND DISPOSAL

Store in the closed original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight.

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