

blank page

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

**Apparent** 

**Glyphosate 450**

**HERBICIDE**

ACTIVE CONSTITUENT: 450 g/L GLYPHOSATE  
present as the isopropylamine salt

**GROUP M HERBICIDE**

A non-selective foliar herbicide that will kill most emerged weeds and plants in situations as indicated in the directions for use table.  
**IMPORTANT: Read the attached booklet before use.**

APVMA Approval No: 65081/0710

**APPARENT PTY LTD A.C.N. 143 724 136**  
Suite G.08 | 762 Toorak Road, Hawthorn East VIC 3123 Australia  
T +61 3 9822 1321 F +61 3 9817 7845 E [enquiries@apparentag.com.au](mailto:enquiries@apparentag.com.au) [www.apparentag.com.au](http://www.apparentag.com.au)

## DIRECTIONS FOR USE

### Restraints:

To ensure herbicide absorption, DO NOT disturb weeds by cultivation, sowing or grazing for 1 day after treatment of annual weeds and 7 days for perennial weeds, except where noted.

| SITUATION  | WEEDS CONTROLLED   | STATE                          | RATE (L/ha)  |
|--|--|--------------------------------|--|
| <b>SOUTHERN AUSTRALIA</b><br>Before sowing a crop or pasture.<br>For weed control prior to sowing a crop or pasture with full soil disturbance by cultivation or tyned implement   | Barley Grass ( <i>Hordeum leporinum</i> ), Brome Grass ( <i>Bromus unioloides</i> ), Volunteer Cereals, Wild Oats ( <i>Avena</i> spp.)   | NSW, VIC, Southern WA, SA only | 400mL - 800mL pre tillering<br>800mL - 1.0L post tillering                       |
|  | Annual Phalaris ( <i>Phalaris canariensis</i> ), Annual Ryegrass ( <i>Lolium rigidum</i> ), Silver Grass ( <i>Vulpia</i> spp.), Winter Grass ( <i>Poa annua</i> )  |                                | 800mL - 1.0L pre tillering<br>1.0L - 1.2L post tillering                         |
|  | Calomba Daisy ( <i>Pentzia suffruticosa</i> ), Capeweed ( <i>Arctotheca calendula</i> ), Spiny Emex/Doublegee ( <i>Emex australis</i> )  |                                | 400mL - 800mL less than 8cm diameter,<br>800mL - 1.2L greater than 12cm diameter |
|  | Amsinkia ( <i>Amsinkia</i> ), Fumitory ( <i>Fumaria officinalis</i> , <i>F. muralis</i> ), Paterson's Curse/Salvation Jane ( <i>Echium plantaginum</i> ), Saffron Thistle ( <i>Carthamus lanatus</i> ), Scotch Thistle ( <i>Onopordum acanthium</i> ), Spear Thistle ( <i>Cirsium vulgare</i> ), Variegated Thistle ( <i>Silybum marianum</i> ), Volunteer Lupins ( <i>Lupinus angustifolius</i> ), Wild Turnip ( <i>Brassica tournefortii</i> ) |                                | 800mL - 1.0L less than 12cm diameter<br>1.0L - 1.2L greater than 12cm diameter   |
|  | Dock seedling ( <i>Rumex</i> spp.)   |                                | 800mL - 1.2L   |
| Seasonal suppression of:<br>Perennial Phalaris ( <i>Phalaris</i> ), Sorrel ( <i>Rumex acetosella</i> ), Sub Clover ( <i>Trifolium subterraneum</i> ), Soursob ( <i>Oxalis pes-caprae</i> ), Skeleton Weed ( <i>Chondrilla juncea</i> ) - fully emerged rosettes (NSW only) |  | 1.2L                           |  |
| All the above weeds  | TAS only   | 1.2L - 2.4L                    |  |
| <b>SOUTHERN AUSTRALIA</b><br>Before sowing a crop or pasture.<br>For weed control prior to sowing a crop or pasture with minimal or no soil disturbance  | Barley Grass ( <i>Hordeum leporinum</i> ), Volunteer Cereals, Wild Oats ( <i>Avena</i> spp.)   | NSW, VIC, Southern WA, SA only | 800mL - 1.2L   |
|  | Brome Grass ( <i>Bromus unioloides</i> ), Canary Grass ( <i>Phalaris</i> spp.), Capeweed ( <i>Arctotheca calendula</i> ), Variegated Thistle ( <i>Silybum marianum</i> ), Winter Grass ( <i>Poa annua</i> )  |                                | 1.0 - 1.6L   |
|  | Annual Ryegrass ( <i>Lolium rigidum</i> ), Paterson's Curse/Salvation Jane ( <i>Echium plantaginum</i> ), Saffron Thistle ( <i>Carthamus lanatus</i> ), Scotch Thistle ( <i>Onopordum acanthium</i> ), Silver Grass ( <i>Vulpia</i> spp.) Spear Thistle ( <i>Cirsium vulgare</i> ), Wild Mustard ( <i>Sisymbrium officinale</i> ), Wild Radish ( <i>Raphanus raphanistrum</i> ), Wild Turnip ( <i>Brassica tournefortii</i> )                    |                                | 1.2L - 1.6L  |
|  | Erodium ( <i>Erodium cicutarium</i> ), Plantain ( <i>Plantago</i> spp.), Perennial Phalaris ( <i>Phalaris aquatica</i> ), Sorrel ( <i>Rumex acetosella</i> ), Sub Clover ( <i>Trifolium subterraneum</i> ), Yorkshire fog ( <i>Holcus lanatus</i> )  |                                | 1.5L - 2.0L  |
|  | Dock ( <i>Rumex</i> spp.), Flatweed ( <i>Hypochoeris radicata</i> )  |                                | 2.0L   |
|  | All the above weeds  |                                | TAS only   |

| CRITICAL COMMENTS   |
|---|
| <p>Use the higher rate when treating in cold/overcast conditions, when using late in the season. Use the lower rate on young weeds and the higher rate on mature weeds i.e. fully tillered grasses or broadleaf weeds at budding or stem elongation. If weeds have been grazed heavily remove stock prior to spraying to on ewth to 6-8cm before treatment and use the higher rate.</p> <p>To allow for herbicide uptake do not begin sowing for 1 day after application for annual weeds and 7-10 days for perennial weeds.</p> <p>If cultivation or sowing does not take place within 21 days retreatment may be necessary.</p> <p><b>Annual Ryegrass, Silver grass and Perennial grasses:</b> It is recommended to use a water volume of 70L/ha or more with low volume nozzles to improve control.</p> <p><b>Crop Establishment:</b> Sowing should not proceed until conditions allow for the formation of a satisfactory seedbed. See Crop Establishment for directions.</p> <p><b>Tank Mixtures:</b> For improved control of clover add dicamba. Read and follow all label directions for the tank mix product.</p> <p>For perennial weeds perennial phalaris, Soursob, Skeleton weed and Sorrel this product will provide knockdown, seasonal suppression and reduction in treated plant numbers.</p>  |
| <p><b>TAS ONLY:</b> Use 1.2L on annual weeds and 2.4L on perennial weeds. The product may also be tank mixed with dicamba to improve control of sorrel, dock and white clover. Observe dicamba label directions and plant back periods.</p> <p>Use the higher rate when treating in cold/overcast conditions, when using late in the season. Use the lower rate on young weeds and the higher rate on mature weeds i.e. fully tillered grasses or broadleaf weeds at budding or stem elongation. If weeds have been grazed heavily remove stock prior to spraying to ensure regrowth to 6-8cm before treatment and use the higher rate.</p> <p><b>Annual Ryegrass, Silver grass and Perennial grasses:</b> It is recommended to use a water volume of 70L/ha or more with low volume nozzles to improve control.</p> <p>Do not sow if heavy trash is present.</p> <p>Seeding may proceed 1 day after spraying annual weeds and 7 days after spraying perennial weeds.</p> <p><b>Aerial Application:</b> May be applied by air provided a good seed bed has been established. Always use the higher rates.</p> <p><b>Tank Mixtures:</b> For improved control of dock, sorrel and sub clover add dicamba. Read and follow all label directions for the tank mix product. Addition of ammonium sulphate 2kg/100L may improve control when treating under adverse environmental conditions.</p> <p><b>Pasture or Crop Establishment:</b> Do NOT sow into excessive trash. Trash may be removed by grazing after treatment. Grazing may commence one day after treatment of annual weeds (small) and 7 days for perennial weeds. Delay grazing for 3 days when annual weeds are large. Sowing may proceed when excessive trash is removed, but not sooner than one day after treatment of annual weeds and 7 days for perennial weeds. See also Crop Establishment.</p> <p><b>Aerial (or Surface) Seeding:</b> Delay seeding until trash is completely removed by grazing and/or plant decay. When establishing pasture, ensure application of fertiliser and insecticides and follow-up management is undertaken as required.</p> <p><b>TASMANIA:</b> Use 1.2L on annual weeds and 2.4L on perennial weeds. The product may also be tank mixed with dicamba to improve control of sorrel, dock and white clover. Observe dicamba label directions and plant back periods.</p> |

| SITUATION  | WEEDS CONTROLLED  | STATE                          | RATE (L/ha)  |
|--|---|--------------------------------|--|
| <b>SOUTHERN AUSTRALIA</b><br>For weed control to commence a fallow                                   | Barley Grass ( <i>Hordeum leporinum</i> ), Volunteer Cereals, Wild Oats ( <i>Avena</i> spp.)  | NSW, VIC, Southern WA, SA only | 800mL - 1.2L   |
|  | Annual Ryegrass ( <i>Lolium rigidum</i> ), Brome Grass ( <i>Bromus unioloides</i> ), Capeweed ( <i>Arctotheca calendula</i> ), Patersons Curse/Salvation Jane (rosette) ( <i>Echium plantaginium</i> ), Saffron Thistle ( <i>Carthamus lanatus</i> ), Scotch Thistle ( <i>Onopordum acanthium</i> ), Spear Thistle ( <i>Cirsium vulgare</i> ), Wild Mustard ( <i>Sisymbrium orientale</i> ), Wild Radish ( <i>Raphanus raphanistrum</i> ), Wild Turnip ( <i>Brassica tournefortii</i> ) |                                | 1.2 – 1.6 L  |
|  | Hoary Cress ( <i>Cardaria draba</i> ), Soursob ( <i>Oxalis pes-caprae</i> )   |                                | 1.2L   |
|  | Couch ( <i>Cynodon dactylon</i> )   |                                | 1.2L - 2.4L  |
|  | All the above weeds   | TAS only                       | 1.2L - 2.4L  |
| <b>NORTHERN AUSTRALIA</b><br>For weed control prior to sowing a summer or winter crop or in a fallow | Annual Palaris ( <i>Palaris</i> spp.), Barley Grass ( <i>Hordeum vulgare</i> ), Volunteer cereals, Wild Oats ( <i>Avena</i> spp.)   | Northern NSW, QLD only         | 400mL - 800mL  |
|  | Barnyard Grass ( <i>Echinochloa crus-galli</i> ), Bilton Grass ( <i>Dactyloctenium radulans</i> ), Columbus grass (seedling) ( <i>Sorghum xalmun</i> ), Liverseed grass ( <i>Urchioa</i> spp.), Lovegrass/Stink Grass ( <i>Eragrostis cilianensis</i> ), Native millet ( <i>Panicum decomposition</i> ), Volunteer Sorghum ( <i>Sorghum bicolor</i> )   |                                | 800mL - 1.6L   |
|  | Aust Bluebell (Old only), ( <i>Wahlenbergia gracilis</i> ), Cudweed ( <i>Gnaphalium luteoalbum</i> ), Fumitory ( <i>Fumaria officinalis</i> ), Mexican Poppy ( <i>Argemone ochroleuca</i> ), New Zealand Spinach ( <i>Tetragonia tetragonoides</i> ), Saffron Thistle ( <i>Carthamus lanatus</i> ), Spear Thistle ( <i>Cirsium vulgare</i> ), Spurge ( <i>Euphorbia</i> spp.), Stinking goosefoot ( <i>Chenopodium vulvaria</i> )   |                                | 800mL - 1.2L   |
|  | Black (giant) pigweed ( <i>Trianthema portulacastrum</i> ), Boggabri Weed ( <i>Amaranthus macrocarpus</i> ), Caltrop ( <i>Tribulis terrestris</i> ), Indian Hedge Mustard ( <i>Sisymbrium orientale</i> ), Mintweed ( <i>Salvia reflexa</i> ), Summer Grass ( <i>Digitaria ciliaris</i> )   |                                | 400mL - 800mL up to 3cm in height or diameter or up to 5 true leaves OR<br>800mL - 1.2L greater than 3cm diameter in height or diameter or up to 5 true leaves |
|  | African Turnip Weed ( <i>Sisymbrium thellungi</i> ), Deadnettle ( <i>Lamium amplexicaule</i> ), Sweet Summer Grass ( <i>Digitaria sanguinalis</i> ), Variegated Thistle ( <i>Silybrum marianum</i> ), Volunteer Sunflower ( <i>Helianthus annuus</i> )  |                                | 600mL - 800mL up to 5 true leaves or 3cm in height or diameter OR<br>800mL - 1.6L greater than 3cm diameter in height or diameter                              |
| <b>NORTHERN AUSTRALIA</b><br>For weed control prior to sowing a summer or winter crop or in a fallow | Annual Ground Cherry ( <i>Physalis ixocarpa</i> ), Bladder Ketmia ( <i>Hibiscus trionum</i> ), Camel Melon ( <i>Citrullus lanatus</i> ), False Castor Oil Plant ( <i>Datura</i> spp.), Noogoora Burr ( <i>Xanthium occidentale</i> ), Turnip Weed ( <i>Rapistrum rugosum</i> ), Wild Lettuce ( <i>Lactuca saligna</i> ), Wild Turnip ( <i>Brassica tournefortii</i> ), Wireweed ( <i>Polygonum aviculare</i> )  | Northern NSW, QLD only         | 800mL - 1.2L prior to stem elongation/budding.<br>After that use 400mL - 1.2L plus 500mL - 700mL 2,4-D ester (800g/L) or 1.2L - 1.6L of this product alone     |
|  | Pigweed ( <i>Portulaca oleracea</i> )   |                                | 800mL - 1.6L up to 20cm in diameter  |

| CRITICAL COMMENTS   |
|---|
| <p>Use the lower rate on young weeds or where cultivation is to take place within 21 days.</p> <p>Use the higher rate where broadleaf weeds reach stem elongation/budding or where grasses are fully tillered.</p> <p>If weeds have been grazed heavily remove stock prior to spraying to ensure regrowth to 6-8cm before treatment and use the higher rate.</p> <p><b>Soursob:</b> Treat at tuber exhaustion</p> <p><b>Hoary Cress:</b> Treat from late rosette to early flowering</p> <p><b>Annual Ryegrass, Silver Grass and Perennial Grasses:</b> It is recommended to use water volumes of 70L/ha or more with low volume nozzles to improve control.</p>   |
| <p><b>TAS ONLY:</b> Use 1.2L on annual weeds and 2.4L on perennial weeds. The product may also be tank mixed with dicamba to improve control of sorrel, dock and white clover. Observe dicamba label directions and plant back periods.</p> <p>Use the lower rate on young weeds.</p> <p>Use the higher rate where broadleaf weeds reach stem elongation/budding or where grasses are fully tillered. At more advanced stages certain broadleaf weeds may require the higher rate range or the addition of 2,4-D.</p> <p>In winter (cold) conditions, symptoms on Deadnettle may be slow to develop.</p> <p>If weeds have been grazed heavily remove stock prior to spraying to ensure regrowth to 6-8cm before treatment and use the higher rate.</p> <p>Liverseed Grass and Barnyard Grass may be very sensitive to moisture stress. Dense stands may require re-treatment.</p> <p>For aerial application see General Instructions. Do not apply by air if temperature is over 30°C</p> <p><b>Crop Establishment:</b> Sowing should not proceed until conditions allow for formation of a satisfactory seedbed. See Crop Establishment for directions.</p> <p><b>Tank Mixtures:</b> Read and follow label directions, restraints, plant back periods, withholding periods and safety directions for the tank mix products. DO NOT tank mix with atrazine when spraying barnyard grass or liverseed grass.</p> |
| <p>As above</p>   |
| <p>Use the higher rate on larger weeds. Control of pigweed over a wide range of growth stages can be achieved with Metsulfuron (600g/kg). Observe recropping intervals.</p>   |

| SITUATION   | WEEDS CONTROLLED                           | STATE                  | RATE (L/ha)                                  |
|---|--|------------------------|--|
| <b>NORTHERN AUSTRALIA (cont)</b><br>For weed control prior to sowing a summer or winter crop or in a fallow | Sowthistle ( <i>Sonchus oleraceus</i> )    | Northern NSW, QLD only | 600mL - 800mL rosettes up to 3cm in diameter |
|   | Couch ( <i>Cynodon dactylon</i> )          |                        | 800mL - 1.6L greater than 3cm in diameter    |
|   | Johnson Grass ( <i>Sorghum halepense</i> ) |                        | 1.2L - 2.4L                                  |
|   | Nutgrass ( <i>Cyperus rotundus</i> )       |                        | 1.5L - 2.4L                                  |
|   |  |                        | 2.4L + 2.4L                                  |

#### PASTURE RENOVATION AND TOPPING

| SITUATION  | WEEDS CONTROLLED   | STATE                      | RATE (L/ha)    |
|--|--|----------------------------|----------------|
| Pasture with Poa Tussock present as a weed<br>For reduction of ground cover allowing pasture renovation  | Most annual weeds and Poa Tussock ( <i>Poa labillardii</i> )   | QLD, NSW, VIC, TAS only    | 2.4L - 3.2L    |
| Pasture with Bent Grass present as a weed<br>For control/suppression of Bent Grass before sowing a crop or pasture   | Annual weeds and Bent Grass ( <i>Agrostis tenuis</i> )   | TAS, VIC only              | 2.0L           |
| Pasture Topping for the reduction of seed set of annual grasses, Capeweed and Calomba Daisy  | Annual Ryegrass ( <i>Lolium rigidum</i> ), Calomba Daisy ( <i>Pentzia suffruticosa</i> )   | NSW, VIC, WA, SA, TAS only | 360mL          |
|  | Barley Grass ( <i>Hordeum leporinum</i> ), Brome Grass ( <i>Bromus unioloides</i> ), Capeweed ( <i>Arctotheca calendula</i> ), Silver Grass ( <i>Vulpia</i> spp)   |                            | 240 – 360 mL   |
| Pasture manipulation for the control/suppression of certain grasses before sowing soybeans, forage crops or Leucaena.<br>Band spraying may be also applied as a band or strip spray. | Carpet Grass ( <i>Xonopus</i> spp.), Kikuyu ( <i>Pennisetum clandestinum</i> ), Paspalum ( <i>Paspalum dilatatum</i> )   | WA, NSW, VIC only          | 1.1L - 4.8L    |
|  | Carpet Grass ( <i>Xonopus</i> spp.), Paspalum ( <i>Paspalum dilatatum</i> )  | QLD only                   | 1.1 – 4.8 L    |
|  | Kikuyu ( <i>Pennisetum clandestinum</i> )  |                            | 500 mL – 4.8 L |
|  | Barbed wire grass ( <i>Cymbopogon refractus</i> ), Black spear grass ( <i>Hederopogon contortus</i> ), Wire grasses ( <i>Aristida</i> spp), Love Grasses ( <i>Eragrostis</i> spp), Red Natal Grass ( <i>Rhynchelytrum repens</i> ) |                            | 2.0 L          |
| Cotton<br>Pre Harvest<br>Do not use on crops intended for seed production  | Bathurst Burr ( <i>X. spinosum</i> ), Noogoora Burr ( <i>X. occidentalis</i> ), Winter Annual Weeds including Sow Thistle/Milk Thistle ( <i>Sonchus oleraceus</i> )  | QLD, NSW, only             | 1L - 2L        |
|  | Nutgrass (seasonal suppression only)   |                            | 2.0L           |

| CRITICAL COMMENTS  |
|--|
| Previously grazed plants may be difficult to control without allowing full recovery.   |
| Use the higher rate for dense infestations. Apply sequential treatments during summer and autumn, with autumn being the most effective. Repeat applications will be required for complete control. For improved control use in conjunction with cultivation.   |
| Use the higher rate on plants approaching seedhead stage. Apply to plants with a minimum of 30cm new growth. Sequential treatments will be required for long term control.   |
| Make the first application to actively growing plants when at least 20% have reached the head stage (normally about Feb). After allowing maximum re-emergence to occur (normally 6-8 weeks), it is essential to make a second application.<br>NOTE: Follow up treatments should be made as part of a nutgrass control programme. |

| CRITICAL COMMENTS   |
|---|
| Before spraying:<br><ul style="list-style-type: none"> <li>graze heavily</li> <li>remove stock 14 days or more before treatment</li> <li>apply after autumn break when plants are actively growing but before frosts begin (March-May)</li> </ul> Increasing to the higher rate may give more effective reductions.<br>Sowing of new pasture may begin 14 days after sowing. It is essential that correct follow-up pasture establishment and management occurs after treatment. Sport treatment will limit re-infestation.<br>May be aerially applied (see aerial equipment).<br>Apply late spring when seed heads have developed but before the onset of summer moisture stress. Remove stock prior to spraying to achieve good foliage cover. Ensure plants are actively growing.<br>10-21 days after spraying fully disturb soil with a tined implement and then sow summer crop and/or re-seeded pasture or crop the following autumn.   |
| Use the higher rate for heavy infestation or where annual ryegrass is present. Apply before 'hayoff'.<br><b>Annual Ryegrass and Capeweed:</b> Apply at flowering<br><b>Other weeds:</b> Apply at head to milky dough stage.<br>Stock should be removed before spraying to allow regrowth.<br>Pasture legumes may be affected. Do not apply to medic/clover crops to be used for hay or seed.<br>Apply the lower rate for suppression only. The higher rate will provide control.<br><b>Band Spraying:</b> Band spraying may be done immediately after the sowing operation. Mount the nozzles behind the coultter/tyres/press wheel assembly of the band seeder. Adjust to spray 0.5 to 1m strips. Ensure minimal disturbance of pasture. Excessive dust created in the seeding operation may reduce herbicide activity. Pasture seed set must be drilled at the appropriate depth and covered by soil.<br><b>Leucaena:</b> (QLD only)<br>Rows should be 4m apart. Use 2L/ha with single taper fan nozzle LFI-80 mounted at the rear of a single row planter giving a 1m swath. |
| Use the lower rate on light infestations of small weeds, where the crop canopy allows adequate spray coverage of the weeds. Increase to the higher rate when the crop canopy may limit coverage, when treating dense infestations, or when treating larger weeds. Apply alone or in tank mixtures with Harvade* or Dropp*. Apply when at least 60% of bolls are open and immature bolls cannot be easily cut with a sharp knife. Where a leafy canopy limits spray coverage, reduced weed control can be expected. For best results under these conditions, delay application until the canopy re-opens following initial conditioning treatment.   |
| Where control of Nutgrass or Noogoora Burr is required, treatments should be applied prior to the onset of frosts. When tank mixed with defoliant, a slightly higher proportion of cotton leaf may be retained, particularly where the higher rate is used. Read and follow all the label instructions for the tank mix product.  |

| SITUATION                   | WEEDS CONTROLLED   | STATE          | RATE (L/ha) |
|-----------------------------|--|----------------|-------------|
| Cotton<br>Shielded Sprayers | Refer to weeds controlled section NORTHERN AUSTRALIA: In fallows or prior to sowing a crop | QLD, NSW, only |             |

#### SUGAR CANE (RATOON CONTROL) FOR QLD AND NSW ONLY

| Crop/Situation               | Weeds                      | State          | Rate (L/ha) |
|------------------------------|----------------------------|----------------|-------------|
| Sugar Cane<br>Ratoon Control | Sugar Cane ratoon regrowth | QLD, NSW, only | 3.2L - 7.2L |

#### RICE DIRECT DRILLING FOR NSW ONLY

| Situation               | Weeds Controlled   | Rate (L/ha)  |
|-------------------------|--|--------------|
| Rice<br>Direct Drilling | Annual Ryegrass ( <i>Lolium rigidum</i> ), Annual Phalaris ( <i>Phalaris canariensis</i> ), Barley Grass ( <i>Hordeum leporinum</i> ), Burr Medic ( <i>Medicago</i> spp.), Sub Clover ( <i>Trifolium subterraneum</i> ), Winter Grass ( <i>Poa annua</i> ) | 800mL - 1.0L |

#### SORGHUM CONTROL

| Situation                         | Weeds Controlled   | State         | Rate (L/ha)  |
|-----------------------------------|--|---------------|--|
| Sorghum control<br>Before harvest | Grain Sorghum ( <i>Sorghum bicolor</i> )                   | QLD, NSW only | 1.2L - 1.6L  |
| Sorghum control<br>Post harvest   | Sorghum stubble (Grain Sorghum ( <i>Sorghum bicolor</i> )) | QLD, NSW only | 800mL - 1.2L for new regrowth from slashed stubble<br><br>1.2L - 1.6L for standing green stubble |

| Situation   | Weeds Controlled                      | Application Rates |                        |                  | State         |
|---|---------------------------------------|-------------------|------------------------|------------------|---------------|
|   |                                       | Boom Spray per Ha | Handgun per 100L Water | Knapsack per 15L |               |
| Woody and Perennial weeds in pastures, forests and non-agricultural areas.<br>(Spot directed or wiper application is required for selectivity in established pastures and forests.) | Bent Grass ( <i>Agrostis tenuis</i> ) | 2L                | 400mL                  | 60mL             | VIC, TAS only |

| CRITICAL COMMENTS   |
|---|
| Apply this product to weeds growing between crop rows using a shielded sprayer. Do not apply to crops less than 20cm high. Do not allow spray or spray drift to contact any part of the cotton plants as severe injury or destruction may result. |

| CRITICAL COMMENTS   |
|---|
| APPLY UNDER GOOD GROWING CONDITIONS ONLY to actively growing ratoons 60 - 120cm tall. DO NOT apply if plants are under stress from low moisture, frost, cold or waterlogging. Use the lower rate for suppression or where control by cultivation is to follow. Use the higher rate for control. |

| CRITICAL COMMENTS  |
|--|
| If plants are drought stressed a pre watering must be applied. If the site has been grazed allow plants to regrow to 6-8cm before treatment. For the control of Annual Ryegrass use the higher rate. |
| <b>Crop Sowing:</b> Sow 1 - 14 days after treatment. Residual control will only be achieved by adding another suitable herbicide.  |

| CRITICAL COMMENTS   |
|---|
| DO NOT apply to varieties intended for seed production or varieties prone to lodging.<br>DO NOT apply to crop under stress from factors such as waterlogging, frost, disease, low moisture etc.<br>Apply when grain moisture is less than 25%. The product can be applied when some browning has occurred.<br>Use the lower rate for control of the crop, late tillers and ratoon regrowth.<br>Use the higher rate for better suppression of ratoon regrowth.<br>Treatment may increase potential for crop lodging especially if the crop has been stressed by low moisture. In this situation harvest as soon as possible after sufficient dry down to prevent further lodging.<br><b>CAUTION:</b> Sorghum may be naturally toxic to stock                   |
| <b>APPLY UNDER GOOD GROWING CONDITIONS ONLY.</b> DO NOT apply if plants are under stress from low moisture, frost, cold or waterlogging.<br><b>SLASHED STUBBLE AND SPRING REGROWTH:</b> Apply when regrowth is at least 20cm high before treatment.<br><b>STANDING STUBBLE:</b> Apply only if sufficient green leaf is present. If grazing has occurred allow regrowth to 20cm high before treatment.<br><b>RATE SELECTION:</b> Use the lower rate for knockdown and regrowth suppression where cultivation is to follow.<br>Use the higher rate for better control of regrowth.<br><b>NOTE:</b> Variable results can occur if the crop has been under stress or grown under marginal conditions.<br><b>CAUTION:</b> Sorghum may be naturally toxic to stock. |
| Use this rate for standing stubble if sufficiently green and for fresh spring regrowth.   |

| CRITICAL COMMENTS  |
|--|
| Apply to actively growing plants in late Spring but before Summer drought stress. Pasture should NOT be heavily grazed at spraying. Bent Grass should have full leaf growth and some seed head development.<br><b>NOTE:</b> Bent Grass re-establishes vigorously from seed in the soil. Follow up management is required to limit seedling re-establishment. Application of this product may be followed by a Spring crop, and/or by reseeding pasture or crop the following Autumn. |

| Situation<br>(cont)   | Weeds Controlled  | Application Rates         |                           |                               | State                      |
|---|---|---------------------------|---------------------------|-------------------------------|----------------------------|
|   |   | Boom Spray<br>per Ha      | Handgun per<br>100L Water | Knapsack<br>per 15L           |                            |
| Woody and Perennial weeds in pastures, forests and non-agricultural areas.<br>(Spot directed or wiper application is required for selectivity in established pastures and forests.) | Bitou Bush/Boneseed<br>( <i>Chrysanthemoides monilifera</i> ) |                           | 800mL                     | 120mL                         | QLD, NSW, VIC,<br>TAS only |
|   | Blackberry ( <i>Rubus fruticosus</i> )                        |                           | 800mL - 1L                | 120 - 160mL                   | All States                 |
|   | Blady Grass ( <i>Imperata cylindrica</i> )                    | 7.2L                      | 1.0L                      | 160mL                         | QLD, NSW only              |
|   | Boxthorn, African ( <i>Lycium ferocissimum</i> )              |                           | 560 - 800mL               | 80 - 120mL                    | All States                 |
|   | Bracken ( <i>Pteridium esculentum</i> )                       | -                         | 1.2L                      | 180mL                         | All States                 |
|   | Brown Beetle Grass  |                           |                           |                               | NSW only                   |
|   | Carpet Grass ( <i>Axonopus</i> spp.)                          | 2.4L                      | 400mL                     | 60mL                          | All States                 |
|   | Cocksfoot ( <i>Dactylis glomerata</i> )                       | 2.4L                      | 560mL                     | 80mL                          | All States                 |
|   | Couch ( <i>Cynodon dactylon</i> )                             | 7.2L                      | 1.0L                      | 160mL                         | All States                 |
|   | Crofton Weed ( <i>Eupatorium adenophorum</i> )                |                           | 400mL                     | 60mL                          | QLD, NSW only              |
| Cumbungi ( <i>Typha</i> spp.)   | 7.2L  | 1.0L                      | 160mL                     | All States                    |                            |
| Flatweed (Cat's Ear)<br>( <i>Hypochoeris radicata</i> )   | 2.4L  | 560mL                     | 80mL                      | All States                    |                            |
| Glyceria, Watermelon Grass<br>( <i>Glyceria maxima</i> )  | 4.8L  | 800mL                     | 120mL                     | Tas only                      |                            |
| Gorse (Furze) ( <i>Ulex europaeus</i> )   |   | 800mL plus<br>Pulse 200mL |                           | All States                    |                            |
| Groundsel Bush ( <i>Baccharis halimifolia</i> )   |   | 560 - 800mL               | 80 - 120mL                | QLD only                      |                            |
| Guinea Grass ( <i>Panicum maximum</i> )   | 7.2L  | 1.0L                      | 160mL                     | All States                    |                            |
| Hawthorn ( <i>Crataegus</i> spp.)   |   | 800mL - 1.0L              | 120 - 160mL               | NSW, VIC, SA, WA,<br>TAS only |                            |
| Hoary Cress ( <i>Cardaria draba</i> )   | 1.2L  | 400mL                     | 60mL                      | VIC, NSW only                 |                            |
| Johnson Grass ( <i>Sorghum halepense</i> ),<br>Kangaroo Grass ( <i>Themeda australis</i> ),<br>Kikuyu Grass ( <i>Pennisetum clandestinum</i> )                                      | 4.8L  | 800mL                     | 120mL                     | All States                    |                            |

| CRITICAL COMMENTS   |
|---|
| Apply to actively growing plants. Spray to wet all foliage. Do not apply during periods of drought stress. Further treatment may be necessary to restrict seedling re-establishment.  |
| Apply from flowering to leaf fall (generally January - May).<br>Plants should not be under stress of high temperature, drought or frost. Spray to wet all foliage. Use the higher rate on old, dense infestations over 1.75m high. Visible symptoms may not be fully apparent until the next season.  |
| Burning (after complete brownout), pasture improvement and/or further treatment are recommended to control seedlings and/or regrowth. Use of CDA equipment is not recommended. In Tasmania, do not treat bushes bearing mature fruit.   |
| Apply to actively growing plants when most have reached the head stage.   |
| Use the lower rate for young bushes; increase to the higher rate for large, mature bushes. Spray to wet all foliage. DO NOT spray during hot, dry Summer periods. Burning (after complete brownout), pasture improvement and/or further treatment are recommended to control seedlings and/or regrowth. Use of CDA equipment is not recommended.  |
| Use of wiper equipment is recommended. Refer to WIPER EQUIPMENT under General Instructions. Multirope equipment is preferred. Double pass application is required to pipewick equipment. Bracken should be slashed in Spring/Summer prior to treatment. Apply in March/May to fully unfurled actively growing fronds but prior to frosts. Visible symptoms may be slow to develop and may not be fully apparent until the next season. Complete control will not be achieved from one application. Repeat treatment is recommended, preferably associated with pasture improvement. |
| Apply to actively growing plants at the early head stage.   |
| Apply to actively growing plants at the early head stage.   |
| Apply to actively growing plants when most have reached the early head stage. In SA and WA apply to active plants during October - November for best results.   |
| Apply to actively growing plants with full foliage. Further treatment and/or pasture improvement are recommended to restrict seedling re-establishment.   |
| Apply to actively growing plants at the early head to full head stage (Summer - Autumn). Re-treatment may be required to restrict seedling re-establishment. For application by wiper equipment refer WIPER EQUIPMENT section under General Instructions. Use of wiper equipment is not recommended for Cumbungi in Tasmania.   |
| Apply to fully developed rosettes at the early flowering stage.   |
| Apply to actively growing plants at the mature head stage in late Summer - Autumn. Add a non-ionic surfactant (50 - 60%a) at 200 - 250mL/100L. Control of Glyceria is only available in dry drains and channels and dry margins of dams lakes and streams. Please refer to PROTECTION OF WILDLIFE, FISH CRUSTACEANS AND ENVIRONMENT.  |
| Apply all year round, but only to actively growing plants. Always add PULSE, otherwise reduced results will occur. Spray to wet all foliage. Burning (after complete brownout), pasture improvement and/or further treatment are recommended to control seedlings and/or growth.  |
| Apply to actively growing plants. DO NOT apply during Winter, or during periods of Summer drought stress. Use higher rate on bushes over 2m tall. Spray to wet all foliage. Further treatment and/or pasture improvement are recommended to control seedlings and/or regrowth.<br>LOW VOLUME APPLICATION (eg Splatter Gun and Gas Gun). Use 1:9 (10%) mixture of product:water. Apply 2 x 2mL dose per 0.5m bush height. Ensure spray contacts all foliage. Use of CDA equipment is not recommended.  |
| Apply to actively growing plants when most have reached the early head stage. For application by wiper equipment refer WIPER EQUIPMENT under General Instructions.  |
| Apply to actively growing plants from flowering to leaf fall. Spray to wet all foliage. Use the higher rate on bushes over 2m tall. Burning (after complete brownout), pasture improvement and/or further treatment are recommended to control seedlings and/or regrowth. LOW VOLUME APPLICATION (eg Splatter Gun and Gas Gun). Use 1:9 (10%) mixture of product:water. Apply 2 x 5mL dose per 0.5m bush height. Ensure spray contacts all foliage.   |
| For maximum long term reduction apply from late July to September when plants are in late rosette to flowering stage. Plants should be actively growing and not under stress of drought, frost or waterlogging. Application may be integrated with long fallow. Cultivation may start 7 days after spraying. Wiper Equipment may be used where sufficient stem elongation occurs. Refer to WIPER EQUIPMENT section under General Instructions for application.  |
| Apply to actively growing plants when most have reached the early head stage. For application by wiper equipment on Johnson Grass, off-type and volunteer sorghum refer to WIPER EQUIPMENT.   |

| Situation<br>(cont)   | Weeds Controlled                          | Application Rates    |                           |                     | State                      |
|---|---|----------------------|---------------------------|---------------------|----------------------------|
|   |   | Boom Spray<br>per Ha | Handgun per<br>100L Water | Knapsack<br>per 15L |                            |
| Woody and Perennial weeds in pastures, forests and non-agricultural areas.<br>(Spot directed or wiper application is required for selectivity in established pastures and forests.) | Lantana ( <i>Lantana camara</i> )         |                      | 800mL                     | 120mL               | QLD, NSW only              |
|   | Mistflower ( <i>Eupatorium riparium</i> ) |                      | 400mL                     | 60mL                | QLD, NSW only              |
| Nutgrass ( <i>Cyperus rotundus</i> )<br>Does not refer to other <i>Cyperus</i> spp. which may be locally known as nutgrass  |   | 4.8L                 | 800mL                     | 120mL               | All States                 |
|   | Paragrass ( <i>Brachiaria mutica</i> )    | 7.2L                 | 1L                        | 160mL               | All States                 |
| Paspalum ( <i>Paspalum dilatatum</i> )  |   | 4.8L                 | 800mL                     | 120mL               |                            |
| Phalaris ( <i>Phalaris aquatica</i> )   |   | 2.4 - 4.8L           | 400 - 800mL               | 60 - 120mL          | SA, VIC, NSW only          |
| Phragmites, Common Reed ( <i>Phragmites australis</i> )   |   | 7.2L                 | 1L                        | 160mL               | All States                 |
| Plantain ( <i>Plantago</i> spp.)  |   | 2.4L                 | 560mL                     | 80mL                | All States                 |
| Prairie Grass ( <i>Bromus unioloides</i> ), Old Blue Grass ( <i>Dichanthium sericeum</i> ), Red-leg Grass ( <i>Bothriochloa ambigua</i> ), Rhodes Grass ( <i>Chloris gayana</i> )   |   | 4.8L                 | 800mL                     | 120mL               | All States                 |
| Rope Twich ( <i>Agropyron repens</i> )  |   | 4.8L                 | 800mL                     | 120mL               | TAS, VIC only              |
| Rushes ( <i>Juncus</i> spp.)  |   | -                    | -                         | -                   | All States                 |
| Sedge, Tall, Umbrella ( <i>Carex</i> spp. and <i>Cyperus</i> spp.)  |   | -                    | -                         | -                   | NSW, VIC, TAS only         |
|   |   | 1.6 - 3.2L           | 400 - 800mL               | 60 - 120mL          | NSW, VIC, TAS only         |
| Silverleaf Nightshade ( <i>Solanum elaeagnifolium</i> )   |   |                      | 1.6L                      | 240mL               | NSW only                   |
| Sorrel ( <i>Rumex acetosella</i> )  |   | 4.8L                 | 800mL                     | 120mL               | All States                 |
| Soursob ( <i>Oxalis pes-caprae</i> )  |   | 1.2L                 | 400mL                     | 60mL                | NSW, VIC, TAS, SA, WA only |
| St. John's Wort ( <i>Hypericum perforatum</i> )   |   | 2.4L                 | 400mL                     | 60mL                | All States                 |
| Sweet Briar ( <i>Rosa rubiginosa</i> )  |   |                      | 1.2 - 1.6L                | 180 - 200mL         | NSW, VIC, TAS, SA, WA only |
| Thistle, Artichoke ( <i>Cynara cardunculus</i> )  |   | 2.4L                 | 400mL                     | 60mL                | VIC, SA only               |
| Thistle, Californian ( <i>Cirsium arvense</i> )   |   | 4.8L                 | 800mL                     | 120mL               | VIC, TAS only              |

| CRITICAL COMMENTS   |
|---|
| Apply to actively growing plants with full foliage. Ensure complete treatment of individual plants. DO NOT spray during periods of Summer drought stress. Burning (after complete brownout). Pasture improvement and/or further treatment are recommended to control seedlings and/or regrowth. LOW VOLUME APPLICATION (eg Splatter Gun and Gas Gun). Use 1:9 (10%) mixture of product:water. Apply 2 x 2mL dose per 0.5m bush height. Ensure spray contacts all foliage.<br>SPRINKLER SPRAYER: Apply 6mL of a 10% solution to every square metre of treated area. Use of CDA Equipment is not recommended.   |
| Apply to actively growing plants with full foliage. Spray to wet all foliage. Further treatment and/or pasture improvement are recommended to restrict seedling re-establishment.<br>SPRINKLER SPRAYER: Apply 3mL of a 10% solution to every square metre of treated area.  |
| Apply to growing plants in late Summer, ie February to mid April when at least 20 - 25% have reached the head stage. Apply in split application 6 - 8 weeks apart.  |
| Apply to actively growing plants when most have reached the early head stage.   |
| Apply to actively growing plants during Winter - Spring. Use the lower rate where only knockdown is required eg prior to burning of firebreaks. Burning can usually start 14 - 21 days after spraying. For long term control increase to the higher rate.   |
| Apply to actively growing, fully developed plants approaching the early head stage. Visible symptoms of control may be slow to develop and may not be fully apparent until the next season. For application by wiper equipment refer to the WIPER EQUIPMENT under General Instructions.   |
| Apply to actively growing, fully developed plants approaching the early head stage. Visible symptoms of control may be slow to develop and may not be fully apparent until the next season. For application by wiper equipment refer to WIPER EQUIPMENT under General Instructions.   |
| Apply to actively growing plants when most have reached the early head stage.   |
| Apply in late Summer - Autumn to actively growing plants with foliage at least 20cm high. To ensure maximum shoot emergence the area should NOT be cultivated in the period from the preceding winter until the time of spraying.   |
| Apply by wiper equipment to actively growing plants. Where there is a large proportion of dead foliage, pre-slashing is recommended. Allow adequate regrowth before treatment. Refer WIPER Equipment for application instructions. Control of Rushes, Tall and Umbrella Sedge is only available in dry drains and channels and dry margins of dams, lakes and streams. Please refer to PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT.   |
| Apply to actively growing plants in flowering to post-flowering period (Oct/April). Use the lower rate only if the stand has been slashed prior to treatment. Re-treatment may be necessary. Visible symptoms may not be fully apparent for up to 3 months. Use of CDA equipment is not recommended.  |
| Use ONLY under good soil moisture conditions. Apply to actively growing plants at the late flowering to berry stage. Repeat spraying will be necessary to restrict growth and seedling re-establishment.  |
| Apply to actively growing plants when most have reached the early bud stage.  |
| For maximum long term reduction apply from late July to early September but before natural plant yellowing (senescence) occurs. Soursob should be actively growing and not under stress of drought or waterlogging. If heavy frosting has occurred allow recovery before spraying. If heavy grazing has occurred allow recovery of foliage to at least 5cm before spraying. In Conservation Tillage (eg direct drilling) situations application in May - July immediately prior to sowing will give control of top growth and give partial reduction of plant numbers. Refer to other soursob entries in the directions for use table for additional critical comments. |
| Apply to actively growing plants in the flowering to post flowering, procumbent stem stage (generally Nov - May). Re-treatment or oversowing with improved pasture species may be necessary to restrict seedling re-establishment.  |
| Apply to actively growing plants from late flowering to leaf fall. Spray to wet all foliage. Use the higher rate on bushes over 1.5m high. Burning (after complete brownout), pasture improvement and/or further treatment are recommended to control seedlings and/or regrowth. LOW VOLUME APPLICATION (eg Splatter Gun and Gas Gun) use 1:9 (10%) mixture of product:water. Apply 2 x 5mL dose per 0.5m bush height. Ensure spray contacts all foliage.   |
| Apply at the rosette - early head stage.  |
| Apply to actively growing plants at the flowering stage. To ensure maximum shoot emergence the area should NOT be cultivated prior to spraying. Re-treatment and/or pasture improvement may be necessary to restrict seedling re-establishment.   |

| Situation<br>(cont)  | Weeds Controlled   | Application Rates    |                           |                     | State      |
|--|--|----------------------|---------------------------|---------------------|------------|
|  |  | Boom Spray<br>per Ha | Handgun per<br>100L Water | Knapsack<br>per 15L |            |
| Woody and Perennial weeds in pastures, forests and non-agricultural areas.<br>(Spot directed or wiper application is required for selectivity in established pastures and forests.)  | Water Hyacinth   | 4.8 - 7.2L           | 800mL - 1L                | 120 - 160mL         | All States |
|  | Water Lettuce  | -                    | 800mL - 1L                | 120 - 160mL         | All States |
|  | Waterlily, Yellow  | 4.8L                 | 800mL                     | 120mL               | All States |
|  | Water Couch ( <i>Paspalum distichum</i> ,<br><i>Paspalum paspalodes</i> )  | 7.2L                 | 1L                        | 160mL               | All States |
|  | Yorkshire Fog ( <i>Holcus lanatus</i> )  | 2.4L                 | 560mL                     | 80mL                | All States |
| Tree and Vine Crops<br>Avocado, banana, blueberries, citrus fruits, custard apples, dubosia, figs - dessert, guava, kiwifruit, litchi, mango monstera fruit, nuts (including almond, pecan, macadamia, pistachio and walnut), olives, pawpaw, persimmons, pome fruit, raspberries, stone fruit, tea, vineyards | Amaranth, Barley Grass, Brome Grass, Barnyard Grass, Caltrop, Canary Grass, Capeweed, Chickweed, Deadnettle, Double Gee, Liverseed Grass, Mintweed, Paterson's Curse, Pigweed, Ryegrass, Silvergrass, Spear Thistle, Thornapple, Spiny Burrgrass, Wild Mustard, Wild Oats, Wild Turnip, Winter Grass, Variegated Thistle | 1.6 - 2.4L           | 400 - 600mL               | 60 - 80mL           | All States |
|  | Couch  | 7.2L                 | 1.0L                      | 160mL               |            |

| CRITICAL COMMENTS   |
|---|
| Apply when plants are actively growing and at or beyond the early bloom stage of growth. Use the higher rate on dense infestations. Control of Water Hyacinth is only available in dry drains and channels and dry margins of dams, lakes and streams. Please refer to PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT.   |
| Best results are obtained from mid-Summer through to Winter. Use the higher rate on dense infestations. Control of Water Lettuce is only available in dry drains and channels and dry margins of dams, lakes and streams. Please refer to PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT.  |
| Apply when there is a maximum emergence of floating leaves. Allow 2 - 3 weeks for symptoms to develop, then re-treat any unaffected plants. Use low volume sprayer. Control of Yellow Waterlily is only available in dry drains and channels and dry margins of dams, lakes and streams. Please refer to PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT.   |
| Apply to actively growing plants in late Summer - Autumn (February - March). DO NOT treat after March because of the onset of winter dormancy. Full results may not be visible until the following spring. Not more than 1/4 of the weed should be submerged at the time of treatment. Control of Water Couch is only available in dry drains and channels and dry margins of dams, lakes and streams. Please refer to PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT. |
| Apply to actively growing plants at the early head stage.   |
| DO NOT allow spray to drift on to crop. This product can be used as a tank mixture with simazine SC formulations for the residual control of annual weeds. This mixture should not be used to control perennial weeds. Apply as a directed or shielded spray or using wiper equipment. DO NOT allow wiper surface to contact any part of the tree, vine or palm. DO NOT apply as a spray near trees or vines less than 3 years old.   |
| <b>CITRUS FRUIT, NUTS AND OLIVES, POME FRUIT AND VINEYARDS:</b> DO NOT allow spray drift to contact green bark or stems, laterals, suckers, fresh wounds, foliage or fruit.   |
| <b>TEA:</b> Apply a maximum of 3.2L/ha by shielded boom or directed off-centre nozzle or 0.4L/100L by directed hand-gun or knapsack to avoid application to the crop.   |
| <b>ALL OTHER CROPS:</b> DO NOT allow spray or spray drift to contact any part of the plant including the trunk.   |
| <b>CAUTION:</b> Where split bark on kiwifruit and green stems on pawpaw occur, extreme care is required. Annual weeds may be sprayed anytime they are actively growing. Use the lower rate on weeds up to 15cm tall.  |

**NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS  
AUTHORISED UNDER APPROPRIATE LEGISLATION  
WITHHOLDING PERIOD: NOT REQUIRED WHEN USED AS DIRECTED**

## GENERAL INSTRUCTIONS

This product is a non-selective liquid herbicide effective in the control of many annual and perennial grasses and broadleaf weeds in crop areas, land preparations and non-crop areas. This product is inactivated on contact with the soil and does not provide residual weed control.

It is absorbed by the plant foliage and green stems and moves through the plant from point of contact to root system.

Visible effects take 3 to 7 days on annual weeds, whereas on perennial weeds it may take 2 to 3 weeks or longer depending on weather conditions following spraying.

No withholding period is required for this product. However to ensure herbicide absorption, grazing of treated areas should be delayed at least one day after treatment of annual weeds and 7 days for perennial weeds. Certain plants (eg. soursob, variegated thistle) are known to be naturally toxic to stock. Where known toxic plants are present, do not allow stock to graze until complete brown out of treated plants has occurred.

## RESISTANT WEEDS WARNING

### GROUP M HERBICIDE

Apparent Glyphosate 450 Herbicide is a member of the glycine group of herbicides. Apparent Glyphosate 450 Herbicide has the inhibitor of EPSP synthase mode of action. For weed resistance management Apparent Glyphosate 450 Herbicide is a Group M Herbicide. Some naturally occurring weed biotypes resistant to the product and other inhibitors of EPSP synthase 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 Apparent Glyphosate 450 Herbicide or any other inhibitors of EPSP synthase herbicide.

Since the occurrence of resistant weeds is difficult to detect prior to use, Apparent Pty Limited accepts no liability for any losses that may result from the failure of this product to control resistant weeds.

## CROP ESTABLISHMENT

This product is recommended for the control of emerged weeds prior to crop establishment. Suitable cultivation and/or sowing operations are required to provide seedbed conditions satisfactory for crop germination and development. Spraying early to control young weeds will favour preparation of suitable seedbeds. On friable soils where there is only a light cover of young weeds, sowing may proceed satisfactorily from one day after spraying. In situations of heavy weed growth, sowing should be delayed until weed decay and soil conditions allow formation of a favourable seedbed. Incorporation of green or decaying vegetation and roots into the seedbed by cultivation or sowing may cause retarded crop emergence, particularly in cold and/or wet conditions. Vegetation may be reduced by grazing, and weed decay may be assisted by cultivation to leave trash on the surface. In marginal seedbed conditions take care to achieve the correct seeding depth, and avoid use of pre-emergence herbicides where label directions advise risk of retarded crop emergence.

## MIXING

1. Clean spray tank and assure it is free from residues of previous spray materials.
2. Fill the spray tank with half the required amount of clean water.
3. Add the required amount of Apparent Glyphosate 450 Herbicide and mix well before adding the remaining water.
4. If surfactant is required, add this last to minimise foaming.
5. Agitate well before spraying.
6. When preparing spray solution, use clean water since hard water containing calcium salts could inactivate glyphosate.
7. Spray solutions of this product should be mixed, stored and applied only in stainless steel, aluminium, brass, copper, fibreglass, plastic or plastic lined containers or spray tanks since a highly flammable gas may be formed. Do not mix or store the product or spray solutions in galvanized steel or unlined steel (except stainless steel).

## TANK MIXES

When tank mixing with other products read and follow all label directions, restraints, plant back periods, withholding periods and safety and first aid directions for the tank mix products.

This product is compatible with the following insecticides: Chlorpyrifos, dimethoate, fenitrothion, Imidan\*, Le Mat\*, metaxysox and Sumithion\*.

Other insecticides have not been tested.

## Atrazines/Triazines

Apparent Glyphosate 450 Herbicide may be tank mixed with Atrazine Flowable or Triazine Flowable for knockdown and residual weed control. Addition of crystalline ammonium sulphate at 2% w/v (2 kg/100 litre spray solution) is recommended to avoid antagonism.

## Dicamba

Apparent Glyphosate 450 Herbicide and Dicamba may be tank mixed for more effective control of Sorrel, Subterranean Clover, medics.

## 2,4-D

Apparent Glyphosate 450 Herbicide may be tank mixed with 2,4-D Ester or 2,4-D Isopropylamine for improved control of broadleaf weeds.

## Chlorsulfuron

Apparent Glyphosate 450 Herbicide and chlorsulfuron tank mix will provide knockdown and residual weed control in fallow and in crop. Observe plant back restrictions for chlorsulfuron.

## Metsulfuron

Apparent Glyphosate 450 Herbicide and metsulfuron tank mix provide knockdown weed control in fallows and prior to planting certain winter cereals. Follow all label instructions on the metsulfuron label.

## Oxyfluorfen

The addition of Oxyfluorfen at the rate of 75 mL/ha to the recommended rate of Apparent Glyphosate 450 Herbicide prior to planting wheat or barley will improve knockdown and increase the speed at which treated weeds develop visual symptoms of phytotoxicity.

## GENERAL SPRAYING INSTRUCTIONS

Do not spray this product if rain is likely to occur within 6 hours.

Do not add extra surfactant or mix with other agricultural chemicals, herbicide oils or any other materials unless specifically directed on the label.

## APPLICATION

### Boom Equipment

Use at spray volume of 25 to 100 L/ha. Fan nozzles at pressure of 240 - 280 Kpa is recommended. Boom height must be set to ensure double overlap of nozzle patterns at the top of the weed canopy.

### Knapsack and Handgun Equipment

Adjust equipment to deliver a fine spray pattern and ensure a complete and uniform wetting of all foliage.

Do not spray in conditions conducive to spray drift.

### Aerial application

Aerial equipment may only be used to apply this product in pasture or fallow situations prior to establishment of field crops, fodder crops, new pasture and for pre-harvest applications to sorghum crops. DO NOT use in intensive horticultural areas.

Use the recommended rates on this label up to a maximum of 3.2L/ha.

For micronair and boom equipment apply in a minimum spray volume of at least 15L/ha with an average droplet size of (or VMD) of 250-350 micron diameter. Swath width should be 15-17m.

### Application on hilly terrain.

As spraying height may vary, to maximise target contact increase water volume to 30-80L/ha and increase droplet size to at least 300 micron (VMD).

### Application procedure in hot conditions

It is recommended that when the temperature reaches 24°C to 26°C, increase water volume to at least 30-35 L/ha and increase droplet size to at least 300 micron VMD. Aerial application is not recommended at temperatures above 32°C.

## WIPER EQUIPMENT

Wiper equipment (ropewick applicators) may be used to apply this product on to weeds growing in oilseed crops, sugar cane, seed and pod vegetables, and tree and vine crops specified in this label, and in pasture and non-crop areas. Avoid contact with desirable vegetation. Operate wiper equipment a minimum of 10 cm above the crop or pasture. Weeds should be at least 15 cm above the crop or pasture at time of application. Speed of travel should be no greater than 8 km/h. Best results are achieved at lower

speeds and where two applications are made in opposite directions (double pass). Where weeds are of variable height, or occur in dense infestations or clumps, some plants may not be contacted by the herbicide solution. In these cases repeat treatment may be necessary. Mix only enough herbicide solution for immediate requirements. DO NOT store mixed solution for more than a few days. Flush out equipment with water after use. Rate: Mix 1 litre of this product with 2 litres clean water to prepare 33% solution. This product may be used according to the above directions for suppression or control of many annual and perennial weeds. See WEEDS CONTROLLED tables for specific use recommendations.

### **SURFACTANT ADDITION**

A non-ionic surfactant may be added. Wetter 1000 at 200 mL/100L (or equivalent non-ionic surfactant) spray solution is recommended.

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

DO NOT contaminate dams, rivers or streams with the product or used containers.

DO NOT apply to weeds growing in or over water.

DO NOT spray across open bodies of water and DO NOT allow spray to enter water.

DO NOT allow water to return to dry channels within 4 days of application.

DO NOT contaminate seed, feed or foodstuffs. Keep container closed to prevent spills and contamination.

### **PROTECTION OF CROP, NATIVE AND OTHER NON-TARGET PLANTS.**

Contact with desirable plants and trees may cause severe damage or destruction.

DO NOT spray in conditions conducive to spray drift.

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

DO NOT re-use container for any other purpose.

### **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.

**For refillable containers:** Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

### **SAFETY DIRECTIONS**

Product will irritate the eyes and skin. Avoid contact with eyes and skin. When preparing product for use, wear elbow-length PVC gloves and face shield or goggles. 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. When using controlled droplet applicator, wear protective waterproof clothing and impervious footwear.

### **FIRST AID**

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126.

### **MATERIAL SAFETY DATA SHEET (MSDS)**

Additional information is listed in the MSDS, which is available from the supplier.

### **EXCLUSION OF LIABILITY**

This product as supplied is of a high grade and suitable for the purpose for which it is expressly intended and must be used in accordance with the directions. The user must monitor the performance of any product as climatic, geographical or biological variables and/or developed resistance may affect the results obtained. No responsibility is accepted in respect of this product, save for those non-excludable conditions implied by the Trade Practices Act or any State or Federal legislation.