

CAUTION

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

GLADIATOR
Dry 680
WG Herbicide

ACTIVE CONSTITUENT:
680g/kg GYPHOSATE (present as the mono-ammonium salt)

GROUP M HERBICIDE

For the control of many annual and perennial weeds in certain situations as indicated in the directions for use.



Grow a better tomorrow.

BOX LABEL - THE BAG MUST NOT BE SOLD SEPARATELY. DO NOT DESTROY BOX WHILE PRODUCT STILL REMAINS.
BAG LABEL - BEFORE USING PRODUCT, READ DIRECTIONS ON OUTER PACK. SALE OF THIS BAG EXCEPT IN OUTER PACK IS ILLEGAL.

IMPORTANT: READ THE ATTACHED LEAFLET BEFORE USING THIS PRODUCT

Nufarm Australia Limited
ACN 004 377 780
103-105 Pipe Road, Laverton North Victoria 3026
Tel: (03) 9282 1000
nufarm.com.au

APVMA Approval No.: 68520/58516

Net Contents: 10kg

STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Shake empty bag into spray tank. DO NOT dispose of undiluted chemicals on site. Puncture and bury empty containers in a local 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, in compliance with relevant Local, State or Territory government regulations. Empty containers and product should not be burnt.

SAFETY DIRECTIONS

Harmful if swallowed. 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 gloves, face shield or goggles and contaminated clothing.

FIRST AID

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

ADDITIONAL STATEMENTS (WHS REGULATIONS 2011)

Causes serious eye damage. Wear eye and face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

SAFETY DATA SHEET

For further information refer to the Safety Data Sheet (SDS), which can be obtained from your supplier or from the Nufarm website – nufarm.com.au

In case of emergency: Phone 1800 033 498 Ask for shift supervisor. Toll free 24 hours.

CONDITIONS OF SALE

"Any provisions or rights under the Competition and Consumer Act 2010 or relevant state legislation which cannot be excluded by those statutes or by law are not intended to be excluded by these conditions of sale. Subject to the foregoing, all warranties, conditions, rights and remedies, expressed or implied under common law, statute or otherwise, in relation to the sale, supply, use or application of this product, are excluded. Nufarm Australia Limited and/or its affiliates ("Nufarm") shall not accept any liability whatsoever (including consequential loss), or howsoever arising (including negligence) for any damage, injury or death connected with the sale, supply, use or application of this product except for liability which cannot be excluded by statute."

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BN / DOM / Barcode

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DIRECTIONS FOR USE:

General Weed Control - All States

| SITUATION | CRITICAL COMMENTS Read Application Checklist before using |
|---|--|
| For general weed control in Domestic areas (Home gardens), Commercial, Industrial and Public Service areas, Agricultural buildings and other farm situations. For specific weeds refer to the appropriate Weeds Controlled table | <ul style="list-style-type: none">• For the control of many grasses and broadleaf weeds. RATE: 5g per litre of water• Apply when weeds are actively growing.• Apply to ensure complete and uniform wetting of foliage.• Visible symptoms may take from 3 to 7 days to develop. |

USE SITUATIONS ALL STATES (EXCEPT WHERE NOTED)

For rates of application and weeds controlled, see **Weeds Controlled** tables.

| SITUATION | CRITICAL COMMENTS |
|---|--|
| NON - agricultural areas Around buildings, Commercial and industrial areas, Domestic and Public Service areas, Right-of ways | Gladiator Dry 680 does not provide residual weed control. For residual control of annual weeds, Gladiator Dry 680 may be tank mixed with certain residual herbicides. See Tank Mixtures/Herbicides . |
| AGRICULTURAL AREAS | Gladiator Dry 680 may be used for control of annual and perennial weeds as directed, in agricultural land prior to sowing of any edible or non-edible crop, but not prior to transplanting tomato seedlings. |
| DRY DRAINS AND CHANNELS (ETC) | 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 and drains within 4 days of application. |
| FORESTS | Gladiator Dry 680 may be used prior to establishment of nurseries, for site preparation prior to planting and amongst established trees using a directed or shielded spray. DO NOT allow spray or spray drift to contact foliage or green bark of desirable trees, since severe injury may result. |

| SITUATION | CRITICAL COMMENTS |
|--|--|
| COTTON Shielded sprayers, Qld & NSW only | SHIELDED SPRAYERS: Apply Gladiator Dry 680 to weeds growing between crop rows using a shielded sprayer. Refer to the Weeds Controlled tables for rates of application. DO NOT apply in crop less than 20cm high. DO NOT allow spray or spray drift to contact any part of the cotton plant as severe injury or destruction may result. |
| TREE AND VINE CROPS Avocado, Banana, Blueberries, Citrus fruit, Custard apples, Duboisia, 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 | Apply as a directed or shielded spray. DO NOT apply as a spray near trees or vines less than 3 years old unless they are effectively shielded from spray and spray drift. Citrus fruit, Nuts, Olives, Pome fruit & Vineyards. DO NOT allow spray or spray drift to contact green bark or stems, canes, laterals, suckers, fresh wounds, foliage or fruit. Tea. Apply a maximum of 2kg/ha by shielded boom or directed off-centre nozzle or 3g/L by directed handgun or knapsack to avoid application to the crop. All other crops. DO NOT allow spray or spray drift to contact any part of the plant including the trunk. CAUTION: Where split bark on Kiwifruit and green stems on Pawpaw occur, extreme care is required. For residual control of annual weeds, Gladiator Dry 680 may be tank mixed with compatible herbicides which are labeled for use in the above crops. See Tank Mixtures/Herbicides for directions. |
| PASTURE | DIRECTED (SPOT) APPLICATION: Gladiator Dry 680 is non-selective and may damage or kill any plant in the sprayed area. Re-treatment and/or pasture improvement may be necessary to restrict seedling re-establishment. BOOM APPLICATION: Gladiator Dry 680 may be used to suppress or kill existing pasture species prior to re-seeding or establishment of other crops. Where spot application is undertaken, grazing stock need not be removed. CAUTION: Certain plants may be naturally toxic to stock. Where known toxic plants are present DO NOT allow stock to graze until complete browning of treated plants has occurred. |
| ONIONS Post-plant, pre-emergence application TAS only | For control of annual weeds and suppression of perennial weeds, including Rope Twitch, apply Gladiator Dry 680 at 530g-1.6kg/ha post-sowing and at least 7 days before crop is due to emerge. DO NOT apply to emerging onion plants as severe injury will result. Use the lower rate on small, actively growing annual weeds. Increase to the higher rate for larger annual weeds (over 15cm tall) and for suppression of perennial weeds. |

STATE REGISTRATION CODE

a – Queensland

d – Tasmania

b – New South Wales

e – South Australia

c – Victoria

f – Western Australia

ANNUAL WEEDS

Registration in all states/territories unless otherwise specified

| WEEDS CONTROLLED | BOOM | HANDGUN/KNAPSACK | CRITICAL COMMENTS |
|--|------------|------------------|--|
| Annual ryegrass Amaranth Barley grass Barnyard grass Bent grass ^{cd} Brome grass Caltrop Canary grass Capeweed Cereals Chickweed Cobbler's peg Deadnettle Doublegee Fumitory Ground cherry Hedge mustard Hoary cress ^{bcd} Lesser Swinecress Liverseed grass Mintweed Noogoora burr ^{ab} Paradoxa grass Paterson's Curse Pigweed Potato weed Saffron thistle Silvergrass Sowthistle Spear thistle Spiny burrgrass Spurge Thornapple Wild oats Wild turnip Winter grass Variegated thistle | 1-1.6kg/ha | 3-5g/L | Apply to weeds whenever they are not subject to stress due to drought or frost. Use higher rate on weeds over 15cm in height or diameter or where dense weed cover limits spray coverage. Use higher spot spraying rate when applying less than 5L spray per 100sqm. Gladiator Dry 680 does not provide residual weed control. Repeat treatments may be necessary to control later germinating weeds For residual control of annual weeds Gladiator Dry 680 may be tank-mixed with certain residual herbicides. See Tank Mixtures in the General Instructions for directions. |

PERENNIAL WEEDS

Registration in all states/territories unless otherwise specified

| WEEDS CONTROLLED | BOOM | HANDGUN/KNAPSACK | CRITICAL COMMENTS |
|---|------------|------------------|--|
| Artichoke thistle ^{ce} African lovegrass ^{bcf} Carpet grass Cocksfoot Flatweed Johnson grass Kikuyu Nutgrass Paspalum Phalaris ^{bce} Plantain Prairie grass Rhodes grass Rope twitch ^{cd} #Tall sedge ^{bcd} Yorkshire fog | 1.5-3kg/ha | 5g/L | Control of established perennials is best obtained when plants are at the seedhead stage. (Early flower flatweed) In general best control of Winter growing perennials is obtained with application during Winter-Spring. Best control of Summer growing perennials is obtained with application late Summer and Autumn. For Nutgrass in cultivated situations apply sequential treatments when Nutgrass has a minimum of 6-8 leaves. Use the higher rate in uncultivated situations. For Rhodes grass and Rope twitch, use the higher boom rate only. |
| Blady grass ^{ab} Bracken Couch #Cumbungi #Glyceria ^d Guinea grass #Paragrass #See Dry Drains and Channel Use situation | 4.5kg/ha | 7g/L | For Bracken add Pulse at 200mL/100L spray mix. Best control of couch in WA and SA is obtained with Spring treatment. Most effective control of couch in eastern states is obtained with Summer and Autumn treatments. In cultivated situations use sequential treatments of 1.5-3kg/ha for control. |

WOODY WEEDS

Registration in all states/territories unless otherwise specified

| WEEDS CONTROLLED | HANDGUN/KNAPSACK | CRITICAL COMMENTS |
|--|------------------|--|
| Bamboo, Bitou bush ^{abcd} , Boxthorn, Gorse, Groundsel bush ^{ab} , Lantana ^{ab} | 5g/L | For Gorse, add Pulse at 20mL/10L of spray mix. |
| Blackberry, Eucalyptus spp. (seedlings <2m) ^{abcdf} , Hawthorn ^{bcd} , Pampas grass, Sifton bush ^{ab} , Willow (<2m) ^{abcdf} | 5-7g/L | For Eucalyptus spp., add Pulse at 20mL/10L of spray mix. |

CONSERVATION TILLAGE

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 | RATE | CRITICAL COMMENTS |
|--|--|---|---|
| SOUTHERN AUSTRALIA Prior to sowing a crop or pasture with full soil disturbance by cultivation or sowing with a tyned implement. WA, SA, Vic and NSW only | Barley grass, Brome grass, Wild oats, Volunteer cereals | 265-530g/ha pre-tillering 530-660g/ha post-tillering | Treat only actively growing weeds not under stress from low moisture, frost, cold, disease or waterlogging. If heavy grazing has occurred, allow regrowth to 6-8cm before spraying and use the higher rate. |
| | Annual phalaris (Canary grass), Annual ryegrass, Silvergrass, Winter grass | 530-660g/ha pre-tillering 660-790g/ha post-tillering | Rate Selection Increase to higher rates late in the season or when treating under cold/overcast conditions. Full disturbance with cultivation or sowing with a tyned implement may start one day after treatment (7 days if Dock, Phalaris, Skeleton weed, Soursob or Sorrel are present) and should occur within 21 days after treatment. Where cultivation or sowing does not occur within 21 days, new weed growth may require further treatment. When treating light infestations of seedling annual grasses (pretillering) and annual broadleaved weeds (less than 8cm dia/height), cultivation or sowing may start 6 hours after treatment and should occur within 21 days. |
| | Calomba daisy, Capeweed, Double gee/Spiny emex | 265-530g/ha less than 8cm diam/ height 530-790g/ha greater than 8cm diam/ height | Crop Establishment Sowing should not proceed until conditions allow the formation of a satisfactory seedbed. See Crop Establishment for directions. |
| | Amsinckia, Fumitory, Paterson's curse, Saffron thistle, Scotch thistle, Spear thistle, Variegated thistle, Volunteer lupins, Wild turnip | 530-660g/ha less than 12cm diam/ height 660-790g/ha greater than 12cm diam/ height | Annual Ryegrass, Silvergrass and Perennial grasses Addition of Wetter TX, 200mL/100L spray solution, may improve control. When treating dense infestation of Silvergrass, use low volume nozzles (eg. SS11001, Hardi. No.10) and a spray volume of 70mL/ha or more is recommended to improve plant spray coverage. |
| | Dock (seedling) Perennial phalaris, Sorrel, Sub clover, Soursob | 530-790g/ha 790g/ha | Tank Mixtures For improved control of clover add Kamba® 500 (dicamba). Read and follow all label directions, restraints, plantback periods, withholding periods, regional use restrictions and safety directions for the tank mix products. See Tank Mixtures for directions. |

| SITUATION | WEEDS CONTROLLED | RATE | CRITICAL COMMENTS |
|---|---|---------------|--|
| | Skeleton weed - fully emerged rosettes NSW only | | Perennial Weeds For Perennial phalaris, Soursob, Skeleton weed and Sorrel, Gladiator Dry 680 will provide knockdown, seasonal suppression and reduction in treated plant numbers. |
| | All the above weeds TAS only | 790g-1.6kg/ha | Tasmania Use 790 g/ha on annual weeds. Increase to 1.6kg/ha where perennial weeds are being treated. To control White clover and improve control of Sorrel and Dock, add 400mL/ha Kamba 500. Observe label directions and plantback periods. |
| SOUTHERN AUSTRALIA Prior to establishing a crop or pasture with an implement that gives minimal or no soil disturbance. NSW, Vic, SA, WA only | Barley grass, Wild oats, Volunteer cereals | 530-790g/ha | Treat only actively growing weeds not under stress from low moisture, frost, cold, disease or waterlogging. If heavy grazing has occurred, allow regrowth to 6-8cm before spraying and use the higher rate. |
| | Brome grass, Canary grass, Capeweed, Variegated thistle, Winter grass | 660g-1kg/ha | Rate Selection - Use the lower rate on young weeds; increase to the higher rate where grasses reach full tillering or where broadleaf weeds commence stem elongation/ budding. Increase to higher rates in Spring and under cold conditions. |
| | Annual ryegrass, Paterson's curse, Saffron thistle, Scotch thistle, Spear thistle, Silvergrass, Wild mustard, Wild radish, Wild turnip | 790g-1kg/ha | Aerial application - Use higher rates. See Aerial Equipment . Annual Ryegrass, Silvergrass and Perennial grasses - Addition of Wetter TX, 200mL/100L spray solution, may improve control. When treating dense infestation of Silvergrass, use low volume nozzles (eg. SS11001, Hardi. No.10) and a spray volume of 70mL/ha or more is recommended to improve plant spray coverage |
| | Erodium, Plantain, Perennial Phalaris, Sorrel, Sub. Clover, Yorkshire fog | 990g-1.3kg/ha | Tank Mixtures - For improved control of clover add Kamba 500 (dicamba). Read and follow all label directions, restraints, plantback periods, withholding periods, regional use restrictions and safety directions for the tank mix products. See Tank Mixtures for directions. Addition of Liase, 2L/100L, may improve control when treating under adverse environmental conditions. |
| | Dock, Flatweed | 1.3kg/ha | Pasture or Crop Establishment - DO NOT sow into excessive trash. Excessive plant residues 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 three days where 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 . Aerial (or Surface) Seeding - Delay seeding until trash level is completely removed by grazing and/or plant decay. When establishing pasture, ensure application of fertilizer and insecticides and follow up management is undertaken as required. |
| | All the above weeds TAS only | 790g-1.6kg/ha | Tasmania - Use 790 g/ha on annual weeds. Increase to 1.6kg/ha where perennial weeds are being treated. To control White clover and improve control of Sorrel and Dock, add 400mL/ha Kamba 500. Observe label directions and plantback periods. |
| SOUTHERN AUSTRALIA To commence a fallow NSW, Vic, SA, WA only | Barley grass, Volunteer cereals, Wild oats | 530-790g/ha | Treat only actively growing weeds not under stress from low moisture, frost, cold, disease or waterlogging. If heavy grazing has occurred, allow regrowth to 6-8cm before spraying and use the higher rate. |
| | Annual ryegrass, Brome grass, Capeweed, Paterson's curse, Saffron thistle, Scotch thistle, Silvergrass, Spear thistle, Wild mustard, Wild radish, Wild turnip | 790g-1kg/ha | Rate Selection Use the lower rate on young weeds or where cultivation is to follow within 21 days. Increase to the high rate where grasses reach full tillering or where broadleaf weeds commence stem elongation/ budding. Annual Ryegrass, Silvergrass and Perennial grasses Addition of Wetter TX, 200mL/100L spray solution, may improve control. When treating dense infestation of Silvergrass, use low volume nozzles (eg. SS11001, Hardi. No.10) and a spray volume of 70mL/ha or more is recommended to improve plant spray coverage. |
| | Hoary cress, Soursob | 790g/ha | Hoary cress Treat from late rosette to early flowering. Soursob Treat at tuber exhaustion. |
| | Couch | 790g-1.6kg/ha | Couch Use the higher rate on dense infestations. Apply sequential treatments during Summer and Autumn, with Autumn being most effective. Repeat applications will be required for full control. For improved control, use in conjunction with cultivation Tank Mixtures For improved control of clover add Kamba 500 (dicamba). Read and follow all label directions, restraints, plantback periods, withholding periods, regional use restrictions and safety directions for the tank mix products. See Tank Mixtures for directions. |

| SITUATION | WEEDS CONTROLLED | RATE | CRITICAL COMMENTS |
|---|---|---|--|
| | All the above weeds TAS only | | Tasmania Use 790 g/ha on annual weeds. Increase to 1.6kg/ha where perennial weeds are being treated. To control White clover and improve control of Sorrel and Dock, add 400mL/ha Kamba 500. Observe label directions and plantback periods. |
| Pasture topping For Annual grass, Capeweed and Calomba daisy seed set reduction | Barley grass, Brome grass, Capeweed, Silvergrass | 160-240g/ha | Remove stock prior to treatment to allow even regrowth. Apply to Capeweed and Annual Ryegrass at FLOWERING. For other grasses, apply from HEAD to MILKY DOUGH stage. Use higher rate for dense infestations or where Annual ryegrass is present. Apply before signs of plants "haying off". Reduction in pasture legume population may occur as a result of treatment. DO NOT apply to clover or medic crops intended for seed or hay. |
| | Annual ryegrass, Calomba daisy | 240g/ha | |
| Seed-head suppression of Perennial grasses | Bentgrass | 200-330g/ha | Timing Treat from late October to late November. Apply before seedheads have emerged. Use the higher rate where growth is excessive and renovation is intended the following Autumn. Follow up management Graze hard after spraying. |
| Poa Tussock infested pasture For reduction of ground cover allowing pasture renovation. | Most annual weeds and suppression of Poa Tussock | 1.6-2.1kg/ha | Timing Graze heavily, then remove at least 14 days before spraying to allow fresh regrowth. Apply to actively growing plants after the Autumn break but before heavy frosts (March-May). Application Increase to the higher rate may give more effective reductions. If aerial spraying, see Aerial Equipment Follow up management Sowing may start from 14 days after spraying. It is essential that correct follow up pasture establishment and management occurs after treatment. Spot treatment will limit re-infestation. |
| NORTHERN Australia In fallow or prior to planting a crop. Qld, NSW only | Annual phalaris (Canary grass), Barley grass, Volunteer cereals, Wild oats | 265-530g/ha | Treat only actively growing weeds not under stress from low moisture, frost, cold, disease or waterlogging. If heavy grazing has occurred, allow regrowth to 6-8cm before spraying and use the higher rate. Note that under Summer (hot) conditions, dense infestations of Barnyard grass and Liverseed grass may require follow up treatment for complete control. Enhanced control of Barnyard grass and Liverseed grass may require follow up treatment for complete control. In Winter (cold) conditions symptoms on Dead nettle may be slow to develop. Rate Selection Use the lower rates on young weeds; increase to the higher rate where grasses reach full tillering or where broadleaf weeds reach stem elongation/ budding. At more advanced stages of growth certain broadleaf weeds require a higher rate range or the addition of 2,4-D ester. Crop Establishment Sowing should not proceed until conditions allow the formation of a satisfactory seedbed. See Crop Establishment for directions. Tank Mixtures Read and follow all label directions, restraints, plant-back, withholding periods, regional use restrictions and safety directions for the tank mix products. DO NOT tank mix with atrazine when spraying Barnyard grass or Liverseed grass. Aerial Application For instructions on aerial application under hot conditions see Aerial Equipment . DO NOT apply by aircraft when ambient temperature is above 30C. |
| | Barnyard grass, Button grass, Columbus grass (seedling), Liverseed grass, Native millet, Stinkgrass (lovegrass), Volunteer sorghum | 530g-1kg/ha | |
| | Australian bluebell (Qld only), Cudweed, Fumitory, Mexican poppy, New Zealand Spinach, Saffron thistle, Spear thistle, Spurge, Stinking goosefoot | 530-790g/ha | |
| | Black (giant) pigweed, Boggabri weed, Caltrop (Yellow vine), Indian hedge mustard, Mintweed, Summer grass | 265-530g/ha up to 5 true leaves or 3cm dia/height 530-790g /ha greater than 5 true leaves or 3cm dia/height | |
| | African Turnip weed, Dead nettle, Sweet Summer grass, Variegated thistle, Volunteer sunflower | 400-530g/ha up to 5 true leaves or 3cm dia/height 530g-1kg/ha greater than 5 true leaves or 3cm dia/height | |
| | Annual ground cherry (gooseberry), Bladder ketmia, Camel melon, False castor oil plant (Thornapple), Noogoora burr, Turnip weed, Wild lettuce, Wild turnip, Wireweed | 530-790g/ha prior to stem elongation/ budding. After that use 265- 790g/ha plus 500-700mL 2,4- D ester (800g/L) or 790g-1kg/ha | |

| SITUATION | WEEDS CONTROLLED | RATE | CRITICAL COMMENTS |
|---|---|--|--|
| | Pigweed | 530g-1kg/ha | Use higher rates on larger weeds. Control of pigweed over a wide range of growth stage can be obtained with the addition of Associate®. Observe re-cropping intervals. |
| | Sowthistle, Milkthistle | 400-530g/ha rosettes up to 3cm dia 530g-1kg/ha greater than 3cm dia | Previously grazed plants may be difficult to control without allowing full recovery. |
| | Couch | 790g-1.6kg/ha | Use the higher rate for dense infestations. Apply sequential treatments during Summer and Autumn, with Autumn being most effective. Repeat applications will be required for full control. For improved control use in conjunction with cultivation. |
| | Johnson grass | 1-1.6kg/ha | 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. |
| | Nutgrass | 1.6+1.6kg/ha | Make 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. Note Follow up treatments should be made as part of a Nutgrass control program. |
| SORGHUM CONTROL (pre-harvest) QLD, NSW only | Sorghum (grain-sorghum) DO NOT apply to varieties intended for seed production or varieties prone to lodging | 790g-1kg/ha | Apply when grain moisture is less than 25%. Pre-harvest treatments may increase the likelihood of crop lodging. Apply treatments to previously slashed/grazed stubble when at least 20cm of new growth has occurred. Caution Sorghum may be naturally toxic to stock. |
| SORGHUM CONTROL (post-harvest) QLD, NSW only | Sorghum stubble (grain-sorghum) | 530-790g/ha for fresh regrowth from slashed stubble. 790g-1kg/ha for standing stubble if sufficiently green and for fresh Spring regrowth | |
| SUGARCANE Ratoon Spray out QLD, NSW only | Sugarcane ratoon regrowth | 2.1-4.8kg/ha | APPLY UNDER GOOD GROWING CONDITIONS ONLY to actively growing rations 60-120cm tall. DO NOT apply if plants are under stress from low moisture or waterlogging. Use the lower rate for suppression or where cultivation is to follow. Use the higher rate for control. |
| RICE Direct drilling NSW only | Annual phalaris (Canary grass), Annual ryegrass, Barley grass, Burr medic, Sub. Clover, Winter grass | 530-660g/ha | Gladiator Dry 680 is less effective in drought-stressed plants. In drought conditions a pre-watering prior to spraying is recommended. In grazed situations, if heavy grazing has occurred allow regrowth to 6-8cm before spraying. Annual ryegrass Add Wetter TX at 200mL/100L of spray solution and where dominant, use the higher rate. Sowing Direct drilling may take place 1-14 days after spraying. Gladiator Dry 680 does not provide residual weed control. Permanent water and approved selective herbicides should be used to provide continuing control of weeds. |
| Cotton (pre-harvest) DO NOT use on crops intended for seed production QLD, NSW only | Bathurst burr, Noogoora burr, Winter annual weeds including Sowthistle/ Milkthistle | 660g-1.3kg/ha | 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 spray coverage, when treating dense infestations, or when treating larger weeds. Apply alone or in tank mixtures with Dropp* or Harvade*. Apply when at least 60% of bolls are open and immature bolls cannot be easily cut with a knife. When a leafy canopy limits spray coverage, reduced weed control can be expected. For best results under these conditions, delay application until canopy re-opens following initial conditioning treatment. |
| | Nutgrass, seasonal suppression only | 1.3kg/ha | Where control of Nutgrass and 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 label directions for the tank mix products. |

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

Gladiator Dry 680 WG Herbicide is a non-volatile, water soluble herbicide for the control of annual and perennial grasses and broadleaf weeds. Gladiator Dry 680 may be used for weed control on agricultural land prior to planting any edible or non edible crop but not prior to transplanting tomatoes. Gladiator Dry 680 is absorbed by plant foliage and green stems. It is inactivated immediately in soil and does not provide residual weed control. Gladiator Dry 680 moves throughout the weed from the point of contact to and into the root system. Visible effects on annual weeds take 3-7 days but may not be noticeable for 2 to 3 weeks under cool cloudy conditions or on some perennial weeds. Gladiator Dry 680 will control emerged weeds only, and provides no residual weed control. Apply treatments to weeds which have at least one true leaf (broadleaf weeds) or two leaves (grasses) to provide an adequate surface area for herbicide uptake.

CROP ESTABLISHMENT

Gladiator Dry 680 is recommended for 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 and where there is only 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 satisfactory 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 correct seeding depth and avoid use of pre-emergence herbicides where label directions advise risk of retarded crop emergence.

MIXING

For boom application, water volumes should not be less than 6 litres per 1kg of Gladiator Dry 680. Reduced results may occur if water containing soil is used, eg. Water from ponds and unlined ditches, or if hard water containing calcium salts is used. Do not mix, store or apply this product or spray solutions of this product in galvanised steel or unlined steel containers or spray tanks, since a highly flammable gas mixture may be formed. Use stainless steel, aluminium, brass, copper, fibreglass, plastic or plastic lined containers or spray tanks. Spray tanks, pumps, lines and nozzles should be thoroughly cleaned with clean water following application to prevent corrosion. Ensure the spray tank is free of any residue of previous spray materials. Use spray solutions promptly and certainly within 5 days, since gradual loss of activity will occur. Good agitation is required particularly under cold conditions, to ensure all of the Gladiator Dry 680 dissolves when first added to the tank.

Full Agitation In Pre-Filled Spray Tank

- Fill the tank with one-half the required amount of clean water and set the pump on full agitation.
- Add the required amount of Gladiator Dry 680 slowly to ensure that it is well dispersed throughout the tank and none collects on the bottom. Suggested rate is 10kg in 2-3 minutes.
- Continue water addition and fully agitate until all the Gladiator Dry 680 is completely dissolved.

SURFACTANT ADDITION

Additional surfactant is not required except where the rate of Gladiator Dry 680 is less than 6g/L when applied by boom. DO NOT mix with spraying oils, agricultural chemicals or other materials except as directed on the label.

TANK MIXTURES

Gladiator Dry 680 may be tank-mixed with the following herbicides, insecticides and additives. Read and follow all label directions, restraints, plant back periods, withholding periods, regional use restrictions and safety directions for the tank-mix products.

Mixing Instructions For All Tank Mixtures:

1. Fill the spray tank 1/3 to 1/2 full with clean water and start agitation.
2. Add Gladiator Dry 680. Mix thoroughly and continue water addition.
3. Where crystalline ammonium sulphate is recommended, wash 2% w/v (2kg/100L spray solution) through a top mesh-screen into the tank and mix thoroughly.
4. Add recommended herbicide/insecticide/additive to the spray tank and mix thoroughly.
5. Add surfactant near the end of the filling process to minimise foaming.
6. Always maintain adequate agitation during application and use the tank mix promptly.

Tank Mixtures - Herbicides

Atrazine[#] flowable or granular (Agricultural uses only. DO NOT apply the tank-mix for control of Barnyard grass or Liverseed grass), Estericide[®] 680 (2,4-D ester), Kamba[®] 500 (dicamba), Express^{*}, Grando[®] 600/Garlon^{*} 600, Lusta[®]/Glean^{*}, simazine[#] flowable or granular, Mako[®]/Oust^{*}, Yield^{*}, Rifle[®] 440, Associate[®] (metsulfuron methyl), Nugran^{*}/Logran^{*} 750WG, Transit[®]/Lontrel^{*}, Flandor^{*} 500, LVE MCPA, Striker[®] and TriflurX (trifluralin).

*Ammonium sulfate may improve the performance of tank mixtures of Gladiator Dry 680 and atrazine or simazine. See directions below.

The addition of Striker at 75mL/ha to recommended rates of Gladiator Dry 680 prior to planting wheat or barley will improve knockdown and increase the speed at which treated weeds develop visible symptoms of phytotoxicity.

Tank Mixtures - Additives

Nufarm Liase

Rate: 2L/100L spray solution.

The addition of Liase to Gladiator Dry 680, when used to control annual weeds MAY improve the performance of Gladiator Dry 680 under adverse environmental conditions such as cool, cloudy weather. Liase may also improve the performance of tank mixtures of Gladiator Dry 680 and atrazine or simazine. Liase may be corrosive to metal parts of the sprayer. Thoroughly flush tanks, pumps and nozzles with water after use.

Pulse® Penetrant

Rate: 20mL/10L spray solution

Add when treating bracken (boom application).

Wetter TX Surfactant

Rate: 20mL/10L spray solution.

Add when treating Annual ryegrass in Spring (from the beginning of August to the end of October), Silvergrass and perennial grasses – see critical comments section. Wetter TX is not a general purpose surfactant and should be used only where recommended.

Tank Mixtures - Insecticides

This product is compatible with the following insecticides. Dimethoate, Imidan*, Le-Mat*, Lorsban* 500, Metasystox, Perfekthion* EC 400, Sumithion ULV and emulsifiable concentrates of dimethoate and fenitrothion. Other insecticides have not been tested.

APPLICATION

Gladiator Dry 680 is a non-selective translocated herbicide. Direct spray contact, or even slight drift, may cause severe injury or destruction of any growing crop or other desirable plants including trees. Clean all equipment after use by thoroughly washing with water.

Boom Equipment

For broadacre application, a spray volume of 60L/ha or less is recommended for optimum performance. Fan nozzles equipment is recommended using pressures in the range 240-280kPa. Boom height must be set to ensure double overlap of nozzle patterns at the top of the weed canopy.

High Volume Application

(e.g. Knapsack/Handgun Equipment) The dilution rate is given as g/litre e.g.: 5 grams Gladiator Dry 680 per 1 litre of water. This is equal to 75g Gladiator Dry 680 per 15 litres of water or 500g per 100 litres of water. Adjust equipment to achieve an even spray pattern. Apply to ensure complete and uniform wetting of all foliage. For handgun equipment, a D6 spray tip (Spraying Systems Australia P/L) or equivalent and an operating pressure of 400-700 kPa are recommended.

Aerial Equipment

Aerial equipment may be used to apply Gladiator Dry 680 only in pasture or fallow situations prior to establishment of field crops, fodder crops or new pastures and for pre-harvest application to sorghum and cotton crops.

DO NOT use in intensive horticultural cropping areas. Use recommended rates of Gladiator Dry 680 specified in this label up to a maximum limit of 2.1kg/ha.

For Micronair and boom equipment, apply in a minimum spray volume of at least 20L/ha. Droplets with an average size (VMD) of 250-350 micron diameter are recommended. Swath width should be 15-17m. Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove herbicide residues.

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 under Summer conditions

High temperatures and/or low relative humidity cause excessive evaporation of spray droplets which may reduce results. When ambient temperature reaches 25°C, increase water volume to at least 30L/ha and increase droplet size to at least 300 micron VMD. DO NOT apply Gladiator Dry 680 by aircraft when ambient temperature is above 30°C.

AVOID DRIFT

DO NOT use with spraying equipment or under meteorological conditions which could be expected to cause spray drift onto nearby susceptible plants, adjacent crops, crop lands or pastures. Equipment settings which produce fine droplets (150 micron or less), winds over 8km/h, inversion conditions, still air and hot dry days all contribute to drift.

APPLICATION CHECK LIST

- DO NOT treat weeds under poor or dormant growing conditions (such as occur in drought, waterlogging, disease, insect damage or following frosts) as reduced weed control may result. Reduced efficacy may also occur when treating weeds heavily covered with dust or silt.
- DO NOT add additional surfactant or mix with any other agricultural chemicals, herbicides, oils or other materials except as specifically directed on this label.
- Gladiator Dry 680 is absorbed by plant foliage and green stems. Rainfall soon after application may wash the herbicide off the weeds, particularly if the weeds are not actively growing, under stress or conditions of low light intensity or darkness.
- Delay treatment of plants wet with dew or rain if water droplets run off when plants are disturbed.
- DO NOT disturb treated weeds by cultivation, sowing or grazing for one day after treatment of annual weeds and 7 days for perennial weeds to ensure herbicide absorption except where noted.
- A withholding period for grazing stock is not required. However, it is recommended that grazing of treated plants be delayed (as recommended above) to ensure herbicide absorption. Certain plants such as Soursob, St John's Wort and Bracken, may be naturally toxic to stock. Where known toxic plants are present, grazing should be delayed until complete browning of treated plants has occurred.



spraywisedecisions.com.au is an online weather forecasting program and is recommended for use when planning your pesticide application.

RESISTANT WEEDS WARNING

| | | |
|--------------|----------|------------------|
| GROUP | M | HERBICIDE |
|--------------|----------|------------------|

Gladiator Dry 680 WG Herbicide is a member of the Glycines group of herbicides. Gladiator Dry 680 has the inhibition of EPSP synthase mode of action. For weed resistance management Gladiator Dry 680 is a Group M herbicide. Some naturally occurring weed biotypes resistant to Gladiator Dry 680 and other Group M 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 Gladiator Dry 680 or other Group M herbicides. Since the occurrence of resistant weeds is difficult to detect prior to use, Nufarm Australia Limited accepts no liability for any losses that may result from the failure of Gladiator Dry 680 to control resistant weeds.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

Avoid contact with foliage, green stems or fruit of crops, desirable plants and trees, since severe injury or destruction may result. 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 dams, rivers or streams with the product or used container. DO NOT apply to weeds growing in or over water. DO NOT spray across open bodies of water.

STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Shake empty bag into spray tank. DO NOT dispose of undiluted chemicals on site. Puncture and bury empty containers in a local 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, in compliance with relevant Local, State or Territory government regulations. Empty containers and product should not be burnt.

SAFETY DIRECTIONS

Harmful if swallowed. 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 gloves, face shield or goggles and contaminated clothing.

FIRST AID

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

ADDITIONAL STATEMENTS (WHS REGULATIONS 2011)

Causes serious eye damage. Wear eye and face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

SAFETY DATA SHEET

For further information refer to the Safety Data Sheet (SDS), which can be obtained from your supplier or from the Nufarm website – nufarm.com.au

In case of emergency: Phone 1800 033 498 Ask for shift supervisor. Toll free 24 hours.

Conditions of sale

"Any provisions or rights under the Competition and Consumer Act 2010 or relevant state legislation which cannot be excluded by those statutes or by law are not intended to be excluded by these conditions of sale. Subject to the foregoing, all warranties, conditions, rights and remedies, expressed or implied under common law, statute or otherwise, in relation to the sale, supply, use or application of this product, are excluded. Nufarm Australia Limited and/or its affiliates ("Nufarm") shall not accept any liability whatsoever (including consequential loss), or howsoever arising (including negligence) for any damage, injury or death connected with the sale, supply, use or application of this product except for liability which cannot be excluded by statute."

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