# DIRECTIONS FOR USE ENCLOSED Batch Number:

#### Herbicide



### **GLYGRAN 710 SG**

Reg. No. L 8449 Act No. 36 of 1947

6: 31/07/2023 - Sept2023



A water-soluble granule, non-selective, systemic post-emergence herbicide with slight or no soil activity, for the control of perennial and annual weeds in agriculture, as well as in non-crop and industrial areas.

#### **ACTIVE INGREDIENT**

glyphosate (glycine) (glyphosate ammonium salt) 710 g ae/kg 780 g/kg **GROUP** 

9

HERBICIDE



#### **Hazard Statements:**

May be harmful if swallowed.
Harmful if inhaled.
Causes mild skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause respiratory irritation.

#### **Precautionary Statements:**

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

Store locked up.

Avoid release to the environment.



Registration holder: UNIVERSAL CROP PROTECTION (PTY) LTD.
Co. Reg. No. 1983/008184/07

P.O. Box 801, Kempton Park, 1620 Tel. (011) 396 2233 Website: www.villacrop.co.za

#### 24 HR EMERGENCY NUMBERS:

Griffon Poison Centre: +27 82 446 8946 24 HR Transport / Spill Emergency no: (Hazcall24) +27 86 044 4411 (Client: Villa Crop Protection)

#### **GLYGRAN 710 SG**

Reg. No. L 8449 Act No. 36 of 1947 HRAC HERBICIDE GROUP CODE: 9

#### **ACTIVE INGREDIENT:**

Registration holder:

UNIVERSAL CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1983/008184/07 PO Box 801, KEMPTON PARK, 1620

Tel. (011) 396 2233

#### **WARNINGS**

#### Withholding period:

Minimum time between the last application and harvest or grazing:		
Maize – including grazing (in tank mixture with Crux 425 SC and Nicoron 750 WDG)	60 days	
Maize (tank mixture with Crux 425 SC)	70 days	
Maize (tank mixture with Crux 425 SC and Crown 750 WDG)	70 days	
Soybeans (tank mixture with Forward 100 EC)	40 days	
Soybeans (tank mixture with Series 240 EC)	28 days	
Soybeans (tank mixture with <b>Elegance Super 750 WDG</b> )	60 days	

#### **Hazard statements:**

May be harmful if swallowed.
Harmful if inhaled.
Causes mild skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause respiratory irritation.

- Handle the product with caution.
- Do not mix, store or apply GLYGRAN 710 SG solutions in galvanised steel or unlined steel (except stainless steel) containers or spray tanks, since a reaction will cause hydrogen gas to form, which is highly combustible.
- Store in a cool, dry, well-ventilated place.
- Store away from food, feeds, seed, fertilizers and other agricultural chemicals.
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: Do not enter treated area until spray deposit has dried unless wearing protective clothing.

#### Aerial application:

• Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas.

#### NOTE

**GLYGRAN 710 SG** is a highly active herbicide, which in small quantities, when used incorrectly, can cause serious damage to crop seedlings, deciduous fruit trees and grapevines during the budding and early season growth stages. Under the following conditions it can cause serious damage as far as 3 to 5 km from the nearest spray path of the aircraft: Cloudy weather with relative humidity above 80 % and low air movement of less than 5 km per hour. When such conditions prevail, aerial application should **NOT** be carried out where crop seedlings, deciduous fruit trees and grapevines in budding or early development stages are present within 5 km of the nearest spray path of the aircraft.

GLYGRAN 710 SG Page 2 of 28

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions, because the action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the weeds to the remedy concerned, as well as by the method, time and accuracy of application. The registration holder further does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for lack of performance of the remedy concerned, due to failure of the user to follow the label instructions or to the occurrence of conditions, which could not have been foreseen in terms of the registration. Consult the supplier in event of any uncertainty.

#### **PRECAUTIONS**

#### Precautionary statements:

Avoid breathing dust, fumes, mists, gas, vapours or spray.

Wash hands thoroughly after handling. Do not touch eyes.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing should not be allowed out of the workplace.

Avoid release to the environment.

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

IF SWALLOWED: Get medical help.

IF ON SKIN: Wash with plenty of water and non-abrasive soap.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical help if you feel unwell.

If skin irritation or rash occurs: Get medical help.

If eye irritation persists: Get medical help.

Collect spillage.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents/container in accordance with local regulations.

- Do not eat, drink or smoke while mixing and applying the product, or before washing hands and face and change of clothing.
- Wash with soap and water immediately after use or accidental skin contact.
- Wash contaminated clothing after use.
- Prevent drift of spray on to other crops, grazing, rivers, dams or areas not under treatment as this may cause serious crop damage.
- Clean application equipment after use.
- Clean spraying equipment directly after use by rinsing with clean water and dispose of wash water where it will not contaminate crops, grazing, boreholes, rivers or dams.
- Containers/packages must be completely emptied before being disposed of in a safe way.
- **Do not** re-use the empty container / package for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.
- Direct or spray drift contact by **GLYGRAN 710 SG** on to leaves and / or immature bark of desired plants can result in serious localised or translocated damage.

GLYGRAN 710 SG Page 3 of 28

Relevant hazardous components		
Glyphosate	71 %	
Rhodapon LZS-94/RP	<5 %	
Edetate disodium	<5 %	
Ethylene diamine alkoxylate	<10 %	

#### **FIRST AID TREATMENT**

- Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure. Immediately consult a doctor.
- Inhalation: Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs. Seek medical attention if you feel unwell after inhalation.
- **Skin**: Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. **Obtain medical attention if irritation persists.**
- Eyes: Flush eyes with clean water for at least 15 to 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention if irritation persists.
- **Ingestion**: Have victim rinse mouth thoroughly with water. Obtain medical advice, showing container and label, if patient feels unwell.

#### **RESISTANCE WARNING**

**GLYGRAN 710 SG** is a group code 9 herbicide. Any weed population may contain individuals naturally resistant to **GLYGRAN 710 SG** and other group code 9 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **GLYGRAN 710 SG** or any other group code 9 herbicide.

To delay herbicide resistance:

- avoid exclusive repeated use of herbicides from the same herbicide group code. Alternate or tank mix with products from different herbicide group codes,
- integrate other control methods (chemical, cultural, biological) into weed control programmes.

#### Mode of Action:

**GLYGRAN 710 SG** contains **Glyphosate**, a glycine derivative compound which belongs to HRAC group 9. It is a non-selective, systemic herbicide which is absorbed by the foliage and translocated acropetally and basipetally in the phloem and xylem throughout the plant. **Glyphosate** is inactivated on contact with the soil. Because of the contact nature of **Glyphosate**, it is a strictly post-emergence (of weeds) active ingredient.

#### **IMPORTANT**

- Inconsistent control of certain grass populations and other broadleaf weeds such as *Lolium* species, *Phalari*s species, *Avena* species, (reported known resistance), *Chenopodium* species (plants with waxy leaves), *Conyza bonariensi*s (Flax-leaf fleabane), *Commelina benghalensis* (Benghal wandering Jew), *Ipomoea* species (natural resistance) occur, due to resistance against **Glyphosate**.
- Some of these populations might be resistant to products containing Paraquat and Diquat.
- Some populations might be resistant to products containing the aryloxyphenoxy propionates, cyclohexanediones and sulfonylureas, but might also have resistance against the Glyphosate containing products, e.g., GLYGRAN 710 SG.
- Due to the fact that these resistance populations vary in size and localities and are difficult to ascertain, it is essential that each land must be inspected annually to identify possible resistance early.
- IF THE ABOVE-MENTIONED PREVENTATIVE MEASURES ARE NOT STRICTLY ADHERED TO, THE REGISTRATION HOLDER CANNOT BE HELD RESPONSIBLE FOR THE FAILURE OF GLYGRAN 710 SG TO CONTROL RESISTANT WEEDS.

For specific information on resistance management contact the registration holder of this product.

GLYGRAN 710 SG Page 4 of 28

#### **DIRECTIONS FOR USE:** Use only as directed.

Re-cropping intervals:

Minimum time between the last application and the anticipated date of planting of a follow-up crop:			
Tank mixture with Lotus 480 SL	re with <b>Lotus 480 SL</b> Follow-up broadleaf crops		
	Follow-up grass crops	0 days	
Tank mixture with <b>Forward 100 EC</b> at a dosage rate of 0.75 ℓ/ha	Follow-up grain crops	10 days	
	Follow-up broadleaf crops	0 days	
Tank mixture with Series 240 EC	Follow-up grain & grass crops – maximum rate of 0.5 litres per hectare	7 days	
Tank mixture with Crux 425 SC	Follow-up maize crops	0 days	
Tank mixture with Crux 425 SC & Halo 750 WDG	Follow-up maize crops	1 month	
Tank mixture with Elegance Super 750 WDG	Follow-up soybeans	0 days	

#### General information and use restrictions:

 Control of weeds in Glyphosate tolerant maize (e.g. Pioneer R and BR cultivars) and soybean (e.g. Pannar and Link Seed cultivars) crops:

This product can only be used post-emergence over-the-top of, or directed onto modified maize and soybean cultivars that are designated as **containing the Glyphosate tolerant gene**. Application of this product onto, or in any maize or soybean cultivars not properly developed as containing the **Glyphosate** tolerant gene, may cause severe injury or death of maize crop plants.

- Herbicidal action of **GLYGRAN 710 SG** may become visible from five (5) days after application depending on weed species, growth stage and environmental conditions.
- Apply GLYGRAN 710 SG post-emergence to vigorously growing weeds, directed to the foliage and immature bark. For difficult to control perennial weeds, application in autumn is recommended, when weeds are actively translocating nutrients into their roots, bulbs, rhizomes and stolons. Any re-growth should be spot sprayed.
- Do not spray whilst weeds are wet, dormant or under stress nor when covered in a layer of dust or when damaged by frost.
- Application with low volume sprayers (e.g., self-drive "high boy" sprayers) at high speeds (> 10 km per hour) may produce dust clouds that will affect the activity of the active ingredient adversely due to adsorption onto dust particles on the weeds' leaf surfaces.
- **GLYGRAN 710 SG** is rain fast within one (1) hour after application. Rain or irrigation within 1 hour after application can have an adverse effect on efficacy.
- In mixed weed situations (annuals amongst problem perennials), mow or spray out annuals, wait for vigorous re-growth of perennials and then spray or spot spray re-growth.
- When applied in a tank mix with other chemicals, adhere to the label recommendations of all products applied.
- Pre-plant weed control on sandy soil (< 10 % clay) should take place at least seven (7) days before transplanting tomato or tobacco seedlings.

#### Compatibility:

• GLYGRAN 710 SG can be tank mixed with the following chemicals:

Cantron® 480 SC/Astron® 480 SC, Halo 750 WDG/Crown 750 WDG, MCPA 400 SL (Potassium salt) (L 5793 / N-AR 1092), Mortar 750 WSG, Corvette 425 SC/Crux 425 SC, 2,4-D AMINE 480 SL (Dimethyl ammonium salt) (L 4505 / W 130459 / N-AR 1096), Brass 200 SL/Bound 200 SL, FORWARD 100 EC (L 9036) (Propaquizafop), Trade 700 WDG/Transfer 700 WDG, Lexus 480 SL/Lotus 480 SL, Nicoron 750 WDG, Series 240 EC/Sequal 240 EC, Elegance Super 750 WDG/Style 750 WDG, Laurel 800 WDG, certain Triazine formulations (with the addition of Velocity® Super), Diuron 800 SC and Diuron 800 WP with the addition of Velocity® Super (Ammonium sulphate) or Velocity® DryMax, Villa 51 and Terbucide 600 WDG/Terbuweed 600 WDG, INTERLOCK® (L 10254 / W 130875 / N-AR 1856) and Link, Summit Super. A low pH of the tank mixture could induce the precipitation of hormone herbicides such as MCPA. Ensure that only Velocity® Super is used in mixtures of GLYGRAN 710 SG and MCPA 400 SL, as this adjuvant will not reduce the tank mixture pH drastically. One of the following ammonium sulphate registered adjuvants must be added with herbicides that recommend the use of ammonium sulphate adjuvants: Velocity® Super, Velocity® DryMax or CLASS ACT® NG (L 10477 / W 1301268).

GLYGRAN 710 SG PAGE 5 OF 28

#### **NOTE**

The addition of a Villa approved Ammonium sulphate adjuvant plus Villa 51 (0.05 %) to the spray water before adding **Diuron** or an applicable **Triazine** in tank mixtures with **GLYGRAN 710 SG**, improves compatibility.

#### Surfactants/Additives:

- For optimum results, a minimum of 1 % **GLYGRAN 710 SG** concentration in the total spray volume is recommended. Where the application is based on a percentage solution rather than a dosage per hectare rate, apply as a full cover application (but not to the point of run-off).
- For improved control of Benghal wandering Jew, Field bind weed, Morning glory and Common purslane, GLYGRAN 710 SG can be mixed with 2,4-D Amine 480 SL or MCPA 400 SL at a maximum of 500 m/ per hectare. Do not add a buffering agent when preparing tank mixtures with any of these 2 products.
- Always add ammonium sulphate (e.g., Velocity<sup>®</sup> Super or Velocity<sup>®</sup> DryMax or Class Act<sup>®</sup> NG to the spray mixture.

#### **Application information:**

- Correctly calibrate all sprayers under field conditions and ensure that the spraying equipment is in good working order.
- Apply GLYGRAN 710 SG at a minimum volume rate of 200 litres spray mixture per hectare. Where the
  volume is less than 120 litres per hectare, the application must be done with purpose designed low
  volume spray equipment (e.g., self-drive "high boy" sprayers).
- The application speed of low volume sprayers must not exceed 25 km per hour on an even soil bed.
   Where the soil bed is more uneven (e.g., due to clods) a maximum application speed of 15 km per hour must be used.
- Ensure that the spray equipment is clean and free of dust or sediment from other chemicals.
- Always use clean water. Avoid the use of brackish or muddy water, or water with a high colloid content derived from soils high in organic matter.
- In situations where drift may be hazardous, use low pressures of 100 to 200 kPa or low drift nozzles or add a drift retardant adjuvant, such as **Interlock**®, when spraying.
- Do not spray when wind speed exceeds 10 km per hour.
- Ensure a fine even droplet distribution (**NOT** a mist spray) and thorough coverage of the target weeds.

#### Aerial application:

Aerial application of **GLYGRAN 710 SG** may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of SANS Code 10118 (Aerial Application of Agricultural Pesticides). Ensure that the spray mixture is distributed evenly over the target area and that the loss of spray material during application is restricted to a minimum. It is therefore essential that the following criteria be met:

- The use of a suitable drift retardant adjuvant and/or low drift nozzles (e.g. straight stream nozzles) is recommended. In the case of fixed-wing aircraft flying at a speed faster than 130 mph, the maximum deflection angle of the nozzles or spray stream, as measured from a horizontal straight backwards orientation, may not exceed 30 degrees. In the case of slower flying fixed wing aircraft, the maximum deflection angle, as described above, may not exceed 55 degrees.
- <u>Volume</u>: A spray mixture volume of 50 litres per hectare is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy, or be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended above.
- <u>Droplet coverage</u>: 30 to 40 droplets per cm<sup>2</sup> must be recovered at the target area.
- <u>Droplet size</u>: A droplet spectrum with a VMD of 350 to 400 micron is recommended. Limit the production of fine droplets less than 150 micron (high drift and evaporation potential) to a minimum.
- <u>Flying height</u>: Maintain the height of the spray boom at 3 to 4 metres above the target. Do not spray when aircraft dives, is in a climb or when banking.
- Use suitable <u>atomising equipment</u> that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product. The spraying system must produce a droplet spectrum with the lowest possible Relative Span.
- Position all the atomisers within the inner 60 to 75 % of the wingspan to prevent droplets from entering the wingtip vortices.

GLYGRAN 710 SG PAGE 6 of 28

- The difference in <u>temperature</u> between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8°C.
- Stop spraying if the wind speed exceeds 15 km per hour.
- Stop spraying under <u>turbulent</u>, unstable and dry conditions during the heat of the day.
- Spraying under temperature <u>inversion conditions</u> (spraying in or above the inversion layer) and/or <u>high humidity conditions</u> (relative humidity 80 % and above) may lead to the following:
  - a) reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage),
  - b) damage to other sensitive crops and/or non-target areas through drifting of the suspended spray cloud away from the target field.
- Ensure that the aerial spray operator knows exactly which fields to spray.

Obtain an assurance from the aerial spray operator that the above requirements will be met, and that relevant data will be compiled in a logbook and kept for future reference.

#### **APPLICATION RATES**

Tables 1.1 to 1.12	Control of annual broadleaf & grass weeds in crops (pre-planting / arable land) and general weed control, including tank mixtures with other herbicides.
Tables 1.13 to 1.14	Control of annual broadleaf & grass weeds in winter rainfall areas, Western
	Cape, including tank mixtures with other herbicides.
Tables 2.1 to 2.4	Crop recommendations (Glyphosate tolerant maize, soybeans, other crops,
	pre-planting/arable land), including tank mixtures with other herbicides.
Tables 3.1 to 3.4	Control of problem weeds (perennial grasses, Nutsedges) & noxious weeds.
Tables 4.1 to 4.3	Forestry applications, Industrial weed control, Sugarcane.
Table 5.1	Pasture renovation.
Table 6.1	Wipe-type application.

#### Dilution rates:

Best results will be obtained when **GLYGRAN 710 SG** represents a minimum concentration of 1.0 %, or more, of the total spray volume used and to calculate for use with knapsack sprayers.

#### For example:

- 1.0 kg in 100 ℓ water = 1.0 % solution
- 2.0 kg in 250  $\ell$  water = 0.8 % solution.
- 0.10 kg (100 g) in 10 litres water (1.0 % solution).
- 0.216 kg (216 g) in 10 litres water (2.16 % solution).
- 0.2 t / ha in 200 litres water = 100 mt in 100 litres water = 10 mt in 10 litres water
- 0.5 ℓ / ha in 200 litres water = 250 mℓ in 100 litres water = 25 mℓ in 10 litres water
- 1.0 ℓ / ha in 200 litres water = 500 mℓ in 100 litres water = 50 mℓ in 10 litres water

#### **Application Dosages:**

Weed spectra in crops are variable according to region, soil type and climatic factors that change seasonally. Therefore, varied and uneven emergence of various weed species may occur at any specific site, where one or more species may dominate. The dosages recommended, aim to cover a broad spectrum of weeds if they are sprayed before upright growing weeds reach 10 cm in height (e.g. Khaki weed), or flat growing weeds reach the 6 to 8 leaf stage (e.g. Common purslane).

GLYGRAN 710 SG Page 7 of 28

## 1. <u>CONTROL OF ANNUAL BROADLEAF & GRASS WEEDS IN CROPS (PRE-PLANTING / ARABLE LAND) AND GENERAL WEED CONTROL</u>

- Use GLYGRAN 710 SG after harvesting of previous crop.
- Do not disturb target plants before 6 hours after application (before planting of crops) and prior to emergence of the new crop.

#### **Annual broadleaf weeds:**

<u>Table 1.1:</u> Annual broadleaf weeds – The following broadleaf weeds will be controlled at the dosage rates and growth stages as indicated below.

GLYGRAN 710 SG			
0.5 to 0.8 kg / ha		1.5 to 2.5 kg / ha	
1 to 12 leaf	12 leaf to pre-flower	Flowering	
Alternanthera pungens	Khaki bur weed		
Amaranthus hybridus	Cape pigweed		
Amaranthus spinosus	Thorny pigweed		
Amaranthus thunbergii	Red pigweed		
Arctotis venusta	Free State daisy		
*Argemone subfusiformis	White flowered Me	xican poppy	
Bidens pilosa	Blackjack		
Boerhavia diffusa	Spiderling		
Cenia turbinata	Goose daisy		
*Chenopodium album	White goosefoot		
*Chenopodium ambrosioides	American goosefoo	ot	
*Chenopodium carinatum	Green goosefoot		
*Chenopodium murale	Nettle-leaved goos	efoot	
Cirsium arvense	Canada thistle		
Citrullus lanatus	Bitter apple		
Cotula tenella	Cotula		
Cucumis spp.	Wild cucumber		
Datura ferox	Large thorn apple		
Datura stramonium	Thorn apple		
Galinsoga parviflora	Gallant soldier		
*Gisekia pharnaceiodes	Gisekia		
Gnaphalium subfalcatum	Cudweed		
Lepidium africanum	Pepper cress		
Medicago spp.	Medics		
Pentzia grandiflora	Stinkweed		
Physalis angulata	Wild gooseberry		
Pseudognaphalium luteo-album	Cudweed		
Pseudognaphalium undulatum	Undulate cudweed		
Spergula arvensis	Corn spurry		
Stellaria media	Chickweed		

Variable control. Take care to avoid the development of resistance. Refer to "RESISTANCE WARNING" above.

GLYGRAN 710 SG PAGE 8 OF 28

 $\underline{\textbf{Table 1.2:}} \ \textbf{Annual broadleaf weeds - The following broadleaf weeds will be controlled at the dosage}$ 

rates and growth stages as indicated below.

GLYGRAN 710 SG			
0.7 to 1.0 kg / ha	1.0 to 1.5 kg / ha	1.5 to 2.0 kg / ha	
1 to 12 leaf	12 leaf to pre-flower	Flowering	
Arctotheca calendula	Cape marigold		
**Conyza canadensis	Horseweed fleaba	ane	
**Conyza floribunda	Tall fleabane		
Coronopus didymus	Swinecress		
Crotalaria sphaerocarpa	Mealie crotalaria		
Emex australis	Spiny emex		
Fumaria muralis	Fumitory		
Hibiscus cannabinus	Kenaf		
Hibiscus trionum	Bladderweed		
*Ipomoea purpurea	Common morning	glory	
Oxalis pes-caprae	Yellow sorrel		
*Portulaca oleracea	Purslane		
Schkuhria pinnata	Dwarf marigold		
***Senecio burchellii	Molteno-disease-	olant	
***Senecio consanguineus	Starvation senecic	0	
Sesamum triphyllum	Wild sesame		
Sonchus oleraceus	Sowthistle		
Tagetes minuta	Khaki weed		
Tetragonia caesia	Self-sown wheat		
Tribulus terrestris	Dubbeltjie		
Veronica spp.	Veronica		

<sup>\*</sup> Even at higher rates, the control of large established Ipomoea or Portulaca species may be variable, necessitating a follow-up application

GLYGRAN 710 SG PAGE 9 OF 28

<sup>\*\*</sup> Inconsistent control and resistance problems. Refer to "RESISTANCE WARNING" above.

<sup>\*\*\*</sup> Variable control. Take care to avoid the development of resistance. Refer to "RESISTANCE WARNING" above

Table 1.3: Annual broadleaf weeds - The following broadleaf weeds will be controlled at the dosage

rates and growth stages as indicated below.			
GLYGRAN 710 SG			
1.2 to 1.5 kg / ha	1.5 to 2.5 kg / ha	2.5 to 3.0 kg / ha	
1 to 12-leaf	12-leaf to pre-flower	Flower	
Acalypha glabrata			
Ageratum conyzoides	Invading ageratu	ım	
Aizoon canariense			
Boerhavia erecta	Spiderling		
Cleome gynandra	Spider wasp		
*Conyza bonariensis	Flax-leaf fleaban	e	
Corchorus trilocularis			
Echium lycopsis	Purple echium		
Euphorbia chamaesyce	Hairy creeping m	nilk weed	
Euphorbia geniculata	Painted milkwee	d	
Euphorbia hirta	Red milkweed		
Euphorbia inaequilatera	Smooth creeping	milk weed	
Fimbristylis hispidula	Slender sedge		
Flaveria bidentis	Smelter's bush		
Gnaphalium undulatum	Undulated cudweed		
Hypochoeris radicata	Hairy wild lettuce	Hairy wild lettuce	
*Ipomoea plebeia			
Lactuca seriola	Wild lettuce		
Lepidium bonariensis	Pepper cress		
Melinis nerviglumis			
Nicandra physaloides			
Oenothera rosea Rose evening primrose		imrose	
Oxalis spp. Sorrel			
Oxygonum sinuadum			
Parthenium hysterophorus Domonia weed			
Polygonum aviculare	Prostrate knotwe	Prostrate knotweed	
Raphanus raphanistrum	Wild radish		
Senecio apifolius			
Sida cordifolia	Heartleaf sida	Heartleaf sida	
Sida rhombifolia	Arrowleaf sida		
Solanum nigrum		Deadly nightshade	
Tephrosia polystachya			
Trianthema portulacastrum			
Verbena officinalis	•		
* E (1) 1 ( ) 1	10 1	1.1.1 20.0 5.11	

Even at higher rates, the control of Conyza or Ipomoea species may be variable, necessitating a follow-up application

Table 1.4: Annual broadleaf weeds - The following broadleaf weeds will be controlled at the dosage rates and growth stages as indicated below

Tates and growth stages as indicated below.		
GLYGRAN 710 SG		
2.5 kg / ha		
1 to 12-leaf		
<sup>1+2</sup> Malva parviflora	Small mallow	
<sup>1</sup> Erodium moschatum	Musk heron's bill	

Not recommended for Malva parviflora (small mallow) control at flowering. Use in conjunction with other registered products.

GLYGRAN 710 SG PAGE 10 OF 28

<sup>&</sup>lt;sup>2</sup> For control of *Malva parviflora* (small mallow) and *Erodium moschatum* (Musk heron's bill) smaller than 12 leaf stage, apply GLYGRAN 710 SG at 2.5 kg per hectare in combination with a recommended Triazine rate for the soil type and crop.

<u>Table 1.5:</u> Annual broadleaf weeds – The following broadleaf weeds will be controlled at the dosage rates and growth stages as indicated below.

rates and growth stages as maleated below.		
GLYGRAN 710 SG		
4.65 kg / ha		
1 to 12-leaf	12-leaf to pre-flower	Flower
Rumex angiocarpus	Sheep sorrel	

#### **Annual grasses:**

#### **NOTE**

Even at the higher rates, the control of large, established tufted Ryegrass species and volunteer maize may be variable which may necessitate a follow-up application. Adjust the rates for volunteer maize according to weed size and density.

## THE FOLLOWING GRASSES WILL BE CONTROLLED AT THE DOSAGE RATES AND GROWTH STAGES AS INDICATED BELOW.

<u>Table 1.6:</u> Annual grasses – The following grasses will be controlled at the dosage rates and growth stages as indicated below.

GLYGRAN 710 SG			
0.7 to 1.0kg / ha 1.5 kg / ha			
1 leaf to pre flower	Flower		
*Avena spp.	Wild oats		
*Avena fatua	Common wild oats		
Briza maxima	Quaking grass		
Bromus diandrus	Ripgut brome		
Eleusine indica	Goose grass		
Ehrharta longiflora	Oat-seed grass		
Hordeum murinum	Wild barley		
*Lolium multiflorum	Italian ryegrass		
*Lolium temulentum	Darnel		
Panicum schinzii	Sweet buffalo grass		
Poa annua	Winter grass		
Rhynchelytrum repens	Natal red-top		
Secale cereale	Rye		
Sorghum bicolor	Wild grain-sorghum		
Tragus racemosus	Large carrot-seed grass		

Inconsistent control and resistance problems. Refer to "RESISTANCE WARNING" above.

<u>Table 1.7:</u> Annual grasses – The following grasses will be controlled at the dosage rates and growth stages as indicated below.

stages as indicated below.			
	GLYGRAN 710 SG		
0.7 to 1.0 kg / ha	1.0 to 1.5 kg / ha 1.5 to 2.0 kg / ha		
1 to 12-leaf	12-leaf to pre-flower Flower		
Chloris virgata	Feathertop chloris		
Paspalum urvillei (seedlings)	aspalum urvillei (seedlings) Tall paspalum		
Phalaris canariensis Canary grass			
*Phalaris minor	Little-seeded car	Little-seeded canary grass	
Setaria pallide-fusca Red bristle grass		3	
Setaria verticillata	Sticky bristle gra	Sticky bristle grass	
Triticum aestivum Volunteer wheat			

<sup>\*</sup> Inconsistent control and resistance problems. Refer to "RESISTANCE WARNING" above.

GLYGRAN 710 SG PAGE 11 OF 28

Table 1.8: Annual grasses – Volunteer maize (EXCLUDING Glyphosate tolerant maize):

Table Her Filman grades Telanteer maile (Excelebility of photoate telefall)			
GLYGRAN 710 SG			
0.7 to 1.0 kg / ha			
1 to 5 leaf			
**Zea mays		Volunteer maize	

<sup>\*\*</sup> **GLYGRAN 710 SG** will not control volunteer **Glyphosate** tolerant maize. Use the higher dosage rate for maize in the 4 to 5 leaf stage.

<u>Table 1.9:</u> Annual grasses – The following grasses will be controlled at the dosage rates and growth stages as indicated below.

GLYGRAN 710 SG				
1.2 to 1.5 kg / ha	1.5 to 2.5 kg / ha		2.5 to 3.0 kg / ha	
1 to 12-leaf	12-leaf to pre	e-flower	Flower	
Bothriochloa insculpta	-			
Brachiaria eruciformis		Sweet signal grass	6	
Dactyloctenium aegyptium	(	Crowfoot		
Digitaria sanguinalis	(	Crab finger-grass		
Echinochloa colona		Marsh grass		
Echinochloa crus-galli	E	Barnyard grass		
Eragrostis capensis	-			
Eragrostis ciliaris	-			
Eragrostis virescens	(	Chilean love grass		
Heteropogon contortus	(	Common spear gr	ass	
Hyparrhenia gazensis	-			
Panicum maximum	(	Common buffalo g	rass	
Paspalum urvillei		Tall Paspalum		
Pseudobrachiaria deflexa	F	alse signal grass		
Setaria sphacelata	-			
Themeda triandra	F	Red grass		
Tragus berteronianus		Small carrot-seed	grass	
Urochloa mosambicensis	E	Bushveld herringb	one grass	
Urochloa panicoides	H	Herringbone grass		
Trystachia leucotrix	-			

GLYGRAN 710 SG PAGE 12 OF 28

#### TANK MIXTURE APPLICATIONS, PRE-PLANT IN CEREALS AND SOYBEANS

<u>Table 1.10:</u> Tank mixture application for the post-emergence control of grass weeds and difficult to control broadleaf weeds, pre-plant in wheat and barley.

GLYGRAN 710 SG	PLUS	PLUS
GLYGRAN / 10 SG	Mortar 750 WSG	A Villa approved Ammonium
1 kg/ha	0.5 kg/ha	sulphate adjuvant

For the post-emergence control of grass weeds and difficult to control broadleaf weeds. Apply in at least 200 litres water per hectare as an overall application. Ensure thorough coverage and wetting of the weeds. Plant crop within 7 days of application, preferably within 1 to 3 days. Weeds must be actively growing and not under stress at the time of application. Allow a re-cropping interval of 28 days after application for the planting of broadleaf crops.

Botanical name	Common name
Amaranthus hybridus	Common pigweed
Arctotheca calendula	Cape Marigold
Bidens bipinnata	Spanish blackjack
Chenopodium album	White goosefoot
Cenia turbinata	Goose Daisy
Echium plantagineum (= E. Lycopsis)	Purple Echium
Eleusine coracana (subsp africana)	Goose grass
Emex australis	Spiny Emex
*Erodium moschatum	Musk heron's bill
**Lolium spp	Rye grass
Malva parviflora	Small mallow
Plantago lanceolata	Narrow-leaved ribwort
Polygonum aviculare	Prostrate knotweed
Portulaca oleracea	Purslane
Raphanus raphanistrum	Wild radish
Rumex acetosella	Sheep sorrel
Schkuhria pinnata	Dwarf marigold
Tagetes minuta	Tall khaki weed
Vicia hirsuta	Tiny purple vetch
Vicia sativa	Vetch
***Datura stramonium	Thorn apple

- \* Variable control (80 % to 90 % weed control can be expected).
- \*\* Certain *Lolium* spp. populations may be resistant to **Glyphosate** and will not be controlled effectively.
- \*\*\* In the 2 to 3 stages.

<u>Table 1.11:</u> Tank mixture application for the post-emergence control of grass weeds and difficult to control broadleaf weeds, pre-plant in maize and other cereals.

Crop	GLYGRAN 710 SG	PLUS	PLUS
Maize	1.0 to 1.5 kg/ha	Lotus 480 SL	A Villa approved
Other cereals	0.8 kg/ha	250 to 320 m∉ha	Ammonium sulphate adjuvant

For the post-emergence control of grass weeds and difficult to control broadleaf weeds. Apply in at least 150 litres water per hectare as an overall application. Ensure thorough coverage and wetting of the weeds. Weeds must be actively growing and not under stress at the time of application. **Lotus 480 SL** is not recommended for use on seed maize, sweetcorn, popcorn and other exotic cultivars. Allow a re-cropping interval of 28 days after application for the planting of broadleaf crops.

GLYGRAN 710 SG PAGE 13 OF 28

<u>Table 1.12:</u> Tank mixtures for the post-emergence control of Glyphosate tolerant volunteer maize,

broadleaf weeds and grasses, pre-plant in maize.

GLYGRAN 710 SG	PL		PLUS	
	<b>Forward 100 EC</b> 0.75 <i>t /</i> ha		0.1 % Link OR 0.3 % Summit Super PLUS A Villa approved Ammonium sulphate adjuvant	
	<b>Forward 100 EC</b> 0.75 ℓ / ha	2,4-D Amine 480 SL 1 l / ha OR Lotus 480 SL 0.32 l / ha	A Villa approved Ammonium sulphate adjuvant <i>PLU</i> S	
1.5 kg / ha		OR Transfer 700 WDG 0.22 kg / ha	0.1 % <b>Link</b>	
	<b>Sequal 240 EC</b> 0.5 to 1.0 ε/ ha		0.1 % Link OR 0.3 % Summit Super PLUS A Villa approved Ammonium sulphate adjuvant	
		<b>2,4-D Amine 480 SL</b> 1 ε / ha	0.1 % <b>Link</b>	
	<b>Sequal 240 EC</b> 0.5 to 1 ℓ / ha	OR	OR	
		<b>Lotus 480 SL</b> 0.32 ℓ / ha	0.3 % Summit Super PLUS A Villa approved	
		OR Transfer 700 WDG 0.22 kg / ha	Ammonium sulphate adjuvant	

#### NOTES:

#### Applications with Forward 100 EC:

- Ensure thorough coverage of the weeds. Use a minimum of 200 litres spray mixture per hectare.
- If arable fields are prepared for planting, **DO NOT** plant any grain crops such as maize or grain sorghum within 10 days after an application of **Forward 100 EC** at a dosage rate of 0.75 litres per hectare.
- **DO NOT** apply **Forward 100 EC** in a tank mixture with any broadleaf herbicides other than these mentioned above. Allow at least three (3) days between the application of **Forward 100 EC** and a broadleaf herbicide.
- Apply **Forward 100 EC** after the crop has reached 4 to 6 leaf stage.
- Crops may sometimes exhibit chlorotic spots on the foliage. These symptoms will disappear with time and without any influence on further growth, yield or quality.

#### Applications with Sequal 240 EC:

- Ensure thorough coverage of the weeds. Apply in at least 150 litres water per hectare.
- For applications with Sequal 240 EC, no withholding period is needed for follow-up broadleaf crops.
- For applications in maize and other grass crops, IF DOSAGE RATES DO NOT EXCEED 0.5 L/HA, A PRE-PLANT INTERVAL OF 7 DAYS ARE RECOMMENDED. WHERE DOSAGE RATES EXCEED 0.5 L/HA, THE PRE-PLANT INTERVAL SHOULD NOT BE LESS THAN 30 DAYS. It is not recommended to use a rate higher than 0.5 t/ha where grass crops are to be planted.
- Apply the higher dosage rate to bigger plants up to 8-leaf stage.
- Allow at least four (4) days after a Sequal 240 EC application before applying any other agrochemical treatment.

GLYGRAN 710 SG PAGE 14 OF 28

Table 1.13: Difficult to control annual and broadleaf weeds and grasses in the winter rainfall areas.

	GLYGRAN 710 SG	
1.5 to 1.8 kg / ha	1.80 to 2.3 kg / ha	2.3 to 2.5 kg / ha
1 to 12-leaf	12-leaf to pre-flower	Flower
Arctotheca calendula	Cape marigold	
Chenopodium album	White goosefoot	
Conyza floribunda	Tall fleabane	
Erodium moschatum	Musk heron's bill	
Hypochoeris radicata	Hairy wild lettuce	
*Lolium spp.	Rye grass	
Medicago polymorpha	Clover	
Raphanus raphanistrum	Wild radish	
Sonchus oleraceus	Sow thistle	

These application rates are recommended for spraying in midwinter in the winter rainfall areas when conditions are less favourable for uptake and translocation of herbicides. The addition of a Villa approved Ammonium sulphate adjuvant to the spray mixture for control of these weeds is important.

Table 1.14: Tank mixture application for the control of weeds in cereal crops in the Western Cape\*:

<b>GLYGRAN 710 SG</b> 1.0 kg / ha	PLUS 2,4-D Amine 480 SL 0.75 t/ ha		
WEEDS CONTROLLED Refer to the 2,4-D Amine 480 SL label for list of weeds that are controlled by 2,4-D Amine 480 SL.			

Inconsistent control and resistance of weeds are not uncommon in the Western Cape. Refer to "RESISTANCE WARNING" and Table 1.13 above.

#### 2. SPECIFIC CROP RECOMMENDATIONS

#### **Glyphosate tolerant maize:**

Broadcast (over the top) application:

Broadcast application of **GLYGRAN 710 SG can only be done after the ground cracking stage up to the V8 stage** (V8 stage = when the first plants in the field have 8 leaves with closed collars around the main stem; however, the actual number of leaves may be more). **Do not** apply broadcast applications if the spray equipment will cause mechanical crop damage. **Broadcast application after the V8 stage may cause yield loss or delayed maturity**. Flat fan or twin jet nozzles, suitable for low water volume deliveries, are recommended. If follow-up applications are required to control specific weed species, e.g. *Cyperus esculentus*, the second application should not be made within 10 days of the first application. If the maize has grown beyond the V8 stage at this time, a directed follow-up application will be necessary (refer below).

#### • <u>Directed application:</u>

Directed **GLYGRAN 710 SG** applications can be made after the V8 stage, if row spacing permits the movement of the sprayer without causing mechanical damage to the crop. Row spacing of 1.5 and 2.1 metres are recommended for conventional tractor mounted spray rigs.

For the control of certain broadleaf weeds mentioned above, **GLYGRAN 710 SG** can be mixed with either **2,4-D Amine 480 SL** or **MCPA 400 SL** at 0.5 litre per hectare. Refer to the **2,4-D Amine 480 SL** or **MCPA 400 SL** labels for "**USE RESTRICTIONS**".

#### Glyphosate tolerant soybeans (broadcast application):

**GLYGRAN 710 SG** may be applied post-emergent to **Glyphosate tolerant** soybeans from the ground cracking stage through to flowering. Allow a minimum of 2 weeks between application and harvest of the crop. Do not exceed the following **GLYGRAN 710 SG** application volumes per hectare:

Cumulative total per season for all applications:
 Pre-plant, pre-emergent applications:
 Total in-crop applications from cracking to flowering:
 5.0 kg per hectare
 1.5 kg per hectare
 3.6 kg per hectare

Maximum pre-harvest application rate: 1.0 kg per hectare

Refer recommendations under "APPLICATION DOSAGES".

GLYGRAN 710 SG PAGE 15 OF 28

<sup>\*</sup> Inconsistent control and resistance problems have been confirmed. Refer to "RESISTANCE WARNING" above

<u>Table 2.1:</u> Tank mixture for the control of yellow and purple nutsedge and certain broadleaf weeds in Glyphosate tolerant maize.

	PLUS	PLUS	PLUS
GLYGRAN 710 SG 1.3 to 2 kg / ha	Corvette 425 Sc/Crux 425 SC 1.2 ℓ / ha	Halo 750 WDG/Crown 750 WDG 0.05 kg / ha	A Villa approved Ammonium sulphate adjuvant

## WEEDS CONTROLLED THE FOLLOWING WEEDS ARE NORMALLY CONTROLLED AT THE DOSAGE RATE AS INDICATED ABOVE:

Botanical name	Common name
Acanthospermum hispidum	Upright starbur
Amaranthus hybridus	Common pigweed
Amaranthus spinosus	Thorny pigweed
Bidens pilosa	Common blackjack
Cleome monophylla	Single leaved cleome
Chenopodium album	White goosefoot
Chenopodium carinatum	Green goosefoot
Cyperus esculentus	Yellow nutsedge
Cyperus rotundus	Purple nutsedge
Datura ferox	Large thorn apple
Galinsoga parviflora	Gallant soldier
Portulaca oleracea	Purslane
Richardia brasiliensis	Tropical Richardia
Setaria verticillata*	Sticky bristle grass*
Schkuhria pinnata	Dwarf marigold
Tagetes minuta	Tall Khaki weed
Xanthium strumarium*	Cocklebur

#### **NOTES**

- <u>Important</u>: This recommended spray mixture can only be applied in genetically modified maize cultivars that are certified as being tolerant to the herbicide active ingredient Glyphosate.
- Apply this post-emergence application as a follow up to a pre-emergence application of Corvette 425 SC/Crux 425 SC plus Leap 840 EC or Platinum Plus 915 EC or Palladium Plus 915 EC as indicated on the registered labels.
- The adjuvant Class Act NG® must be used with all post-emergence applications of GLYGRAN 710 SG plus Halo 750 WDG/Crown 750 WDG plus Corvette 425 SC/Crux 425 SC as indicated on the registered product labels.
- For optimum control of Nutsedge, apply GLYGRAN 710 SG plus Halo 750 WDG/Crown 750 WDG plus Corvette 425 SC/Crux 425 SC on actively growing Nutsedge under moist conditions, 3 to 5 weeks after planting. Ensure that the application is made after the majority of the Nutsedges have germinated but before flowering. New germination of Nutsedge may occur if application was performed too early. Later applications, when the Nutsedge is in flower, will also give sub-optimal results.
- Halo 750 WDG/Crown 750 WDG should not be used on any sweetcorn or super sweet maize cultivars.
- Refer to the Corvette 425 SC/Crux 425 SC and Halo 750 WDG/Crown 750 WDG labels for USE RESTRICTIONS and DIRECTIONS FOR USE.

GLYGRAN 710 SG PAGE 16 of 28

<u>Table 2.2:</u> Tank mixtures for the post-emergence control of Glyphosate tolerant volunteer maize,

broadleaf weeds and grasses, post-emergence in glyphosate tolerant soybeans.

GLYGRAN 710 SG	PLUS	PLUS
1.5 kg/ha	Forward 100 EC 0.75 ℓ / ha OR Sequal 240 EC 0.5 to 1.0 ℓ / ha OR	0.1 % Link OR 0.3 % Summit Super PLUS A Villa approved Ammonium sulphate adjuvant
	Elegance Super 750 WDG 14 g/ha (1 sachet per hectare)	0.1 % Link PLUS A Villa approved Ammonium sulphate adjuvant

#### **NOTES:**

Refer to "Tank mixtures for the post-emergence control of Glyphosate tolerant volunteer maize, broadleaf weeds and grasses, pre-plant in maize" for more recommendations on the above tank mixtures.

Application with **Elegance Super 750 WDG** in soybeans:

• For residual control of annual grass weeds, **Platinum 960 EC/Metolachlor 960 EC** can be added at the dosage rate according to soil clay content.

Table 2.3: General post-emergence control of weeds in Glyphosate tolerant maize and soybeans

Crop & Weed type	Dosage rate	Stage of weed growth
Annual grasses and broad leaf weeds:	1.0 kg/ha	Apply before 100 mm height or 8-leaf stage.
	1.3 kg/ha	Apply between 100 and 200 mm or up to the 12-leaf stage.
Difficult to control species requiring a follow-up spray (variable control*): Wandering Jew* Commelina benghalensis Morning glory* Ipomoea purpurea Common purslane* Portulaca oleracea Devil's thorn Tribulus terrestris	1.5 kg/ha	Apply at the 3-leaf stage; follow up with 1.5 kg per hectare 10 to 20 days later.  Apply at the 4- to 5- leaf stage; follow up with 1.5 kg per hectare 10 to 20 days later.  Apply before flowering.  Apply before first flowers appear.
Difficult to control biennial and perennial weed species: Yellow nutsedge (Cyperus esculentus)	1.5 kg/ha	Apply at the 3- to 4-leaf stage and follow up with 1.5 kg per hectare, 10 to 20 days later.
Conyza spp.		Apply before 8-leaf stage.

#### **Glyphosate tolerant Maize only:**

Improved residual control of broadleaf weeds.

- Above-mentioned General post-emergence weed control dosage rates PLUS 0.8 to 1.6 kg per hectare Terbucide 600 WDG/Terbuweed 600 WDG.
- Consult the Terbucide 600 WDG/Terbuweed 600 WDG label for WARNINGS, PRECAUTIONS, USE RESTRICTIONS and DIRECTIONS FOR USE.

Improved control of Yellow nutsedge and certain broadleaf weeds.

- Above-mentioned **General post-emergence weed control** dosage rates **PLUS** 50 grams per hectare **Halo 750 WDG/Crown 750 WDG**.
- Consult the Halo 750 WDG/Crown 750 WDG label for WARNINGS, PRECAUTIONS, USE RESTRICTIONS and DIRECTIONS FOR USE.

Post-emergence application of GLYGRAN 710 SG plus Cantron<sup>®</sup> 480 SC/Astron<sup>®</sup> 480 SC on Glyphosate tolerant maize cultivars:

GLYGRAN 710 SG PAGE 17 OF 28

Crop & Weed type	Dosage rate	Stage of weed growth
------------------	-------------	----------------------

• GLYGRAN 710 SG at 0.65 to 0.8 kg / ha Plus 210 to 260 mℓ / ha Cantron® 480 SC/Astron® 480 SC.

#### Notes:

- This treatment can be applied as a stand-alone post-emergence application or as a follow up to a preemergence application of Cantron® 480 SC/Astron® 480 SC in tank mixture with Metolachlor 800 EC or Platinum Plus 915 EC or Premium 840 EC/Leap 840 EC as indicated on the registered labels.
- Use the higher dosage rate for more difficult weeds or higher weed pressure situations. Apply to young actively growing weeds.

Refer to the Cantron® 480 SC/Astron® 480 SC label for USE RESTRICTIONS and DIRECTIONS FOR USE.

#### Glyphosate tolerant Soybeans only:

Improved control of Yellow nutsedge and certain broadleaf weeds.

Above-mentioned **General post-emergence weed control** dosage rates **PLUS** 14 g per hectare **Elegance Super 750 WDG**.

Consult the **Elegance Super 750 WDG** label for **WARNINGS**, **PRECAUTIONS**, **USE RESTRICTIONS** and **DIRECTIONS FOR USE**.

Improved residual control of various broadleaf weeds.

Above-mentioned **General post-emergence weed control** dosage rates **PLUS** 18 to 36 grams per hectare **Laurel 800 WDG**, as per recommended soil type.

Consult the Laurel 800 WDG label for WARNINGS, PRECAUTIONS, USE RESTRICTIONS and DIRECTIONS FOR USE.

#### **NOTE**

Carefully read "Broadcast" and "Directed application" above for application spray instructions in maize.

THE FOLLOWING WEED SPECIES WILL NOT BE CONTROLLED AT THESE RECOMMENDED RATES:			
Botanical name Common name			
Cynodon dactylon	Common quick grass		
Convolvulus arvensis	Field bind weed		
Oenothera stricta	icta Evening primrose		
Panicum maximum	Common buffalo grass		
Paspalum spp.	Paspalum species		

Table 2.4: General weed control in other crops

Table 2.4. General weed Conti	or in other crope
Crop	Remarks
Almonds, Aloes, Apples, Apricots, Avocados, Bananas, Blackberry, Cherries, Citrus, Coffee, Granadilla, Guava, Hops, Kiwi fruit, Litchis, Macadamia nuts, Mangoes, Nectarines, Olives, Pawpaw, Peaches, Pears, Pecan nuts, Pineapples, Plums, Prickly pears, Prunes, Quince, Tea, Sisal	<ul> <li>Refer to Tables 1.1 to 1.14 and 3.1 to 3.4 for dosage rates of GLYGRAN 710 SG.</li> <li>Protect young trees with green bark from direct spray.</li> <li>Direct spray onto weeds.</li> <li>Do not spray onto pruned trees until wounds have sealed properly.</li> <li>NOTE FOR SISAL:         Apply to nursery and mature plants as a directed inter-row spray.     </li> </ul>

GLYGRAN 710 SG PAGE 18 OF 28

Crop	Dosage rates	Remarks				
Grapevines	Apply before bud burst to vines older than 2 years.					
	<ul> <li>Younger vines with green bark should be shielded.</li> </ul>					
	Direct spray onto weeds.					
	Do not spray onto prun	ed vines until wounds have sealed properly.				
	0.8 kg / ha  Early winter: (Weeds under 15 cm height).  Not for Small mallow (Malva parviflora), Cap					
	PLUS	marigold ( <i>Arctotheca calendula</i> ), Oat seed grass ( <i>Erharta</i> spp.), Blue echium ( <i>Echium vulgare</i> ),				
	3.0 <i>d</i> ha <b>MCPA 400 SL</b>	Ryegrass (Lolium* spp.), Sow thistle (Sonchus oleraceus) and Brome spp. (Bromus spp.)				
	1.0 kg / ha	Late winter: (Weeds under 30 cm height). Use				
	PLUS	the higher rates for Bur clover ( <i>Medicago polymorpha</i> ), Prostrate knotweed ( <i>Polygonum aviculare</i> ) and Sheep sorrel, ( <i>Rumex</i>				
	4.0 <i>ℓ</i> /ha <b>MCPA 400 SL</b>	angiocarpus).				
Grapevines & Stone & Pome	1.5 kg / ha					
<u>fruit</u> *						
	PLUS	Do not spray vines younger than two (2) years, unless stems are shielded.				
	2 ℓ / ha <b>Bound 200 SL</b>	Start with application in late winter or early spring.				
	PLUS	Spraying should commence before bud burst in bush and low trellised vines.				
	1 ℓ / ha <b>Summit</b>	Do not apply onto overhanging foliage or green				
	OR	portions of the vines, when the trellises are high.				
	1.5 kg / ha	Follow-up treatments may be required for				
	PLUS  effective control of perennial or proble weeds 4 to 6 weeks after the initial s otherwise indicated.					
	450 g / ha <b>Brass Dry</b> <b>880 WSG</b>	Conyza spp.: Spray before seed sets or plants				
	PLUS	reach a height of 25 cm.				
	1 ℓ / ha <b>Summit</b>					

NOTE: Refer to "WEEDS CONTROLLED" table below.

WEEDS CONTROLLED					
Botanical name Common name					
Erigeron sumatrensis = Conyza albida	Tall fleabane				
Erigeron bonariensis = Conyza bonariensis	Flax-leaf fleabane				
Erigeron canadensis = Conyza canadensis	Canadian fleabane				
Lolium multiflorum	Italian ryegrass				
Malva parviflora	Small mallow				
Melinis repens	Natal redtop				
Raphanus raphanistrum	Wild radish				

Inconsistent control and resistance of weeds are not uncommon in the Western Cape. Refer to "RESISTANCE WARNING" and Table 1.13 above

GLYGRAN 710 SG PAGE 19 OF 28

Crop	Dosage rates	Remarks
Citrus & Apples	1.5 kg / ha	Apply during spring. Spray post emergence of
	PLUS	weeds when weeds are growing actively.
	3.4 kg / ha Terbucide 600 WDG / Terbuweed 600 WDG	Apply in at least 150 to 200 litres of water per hectare as an overall application. Ensure thorough coverage and wetting of the weeds.
	PLUS	Apply only in orchards at least one (1) year after transplant, preferably older.
	A Villa approved Ammonium sulphate adjuvant	DO NOT apply Terbucide 600 WDG / Terbuweed 600 WDG to alkaline soils and/or shallow soils that are subject to waterlogging.
Glyphosate tolerant maize	1.0 to 1.5 kg / ha <b>PLUS</b>	This application should be preceded by a post- planting, pre-emergence application of <b>Platinum</b> <b>Plus 915 EC</b> , applied at a rate of 1 litre per hectare.
	1.2 to 1.6 ℓ / ha	Apply the tank mixture of GLYGRAN 710 SG and
	Crux 425 SC	<b>Crux 425 SC</b> post-emergence of weed and crop when grass weeds are at the 2 to 4 leaf stage and
	PLUS	broadleaf weeds at a 4 to 6 leaf stage.
	0.1 % <b>Villa 51</b>	Apply in 200 litres water per hectare.
	2 kg/ha	
	PLUS	
	1.6 <i>ຢ</i> /ha	Apply post emergence of woods and grop when
	Crux 425 SC	Apply post-emergence of weeds and crop when weeds are in a 4 to 6 leaf stage.
	PLUS	Weed species controlled include Sorghum
	0.06 kg/ha <b>Nicoron 750 WDG</b>	halepense, Sorghum bicolor and Rottboelia cochinensis.
	PLUS	Apply in 200 litres water per hectare.
	A Villa approved Ammonium sulphate adjuvant	

GLYGRAN 710 SG PAGE 20 OF 28

#### 3. CONTROL OF PROBLEM AND NOXIOUS WEEDS

#### 3.1 Perennial grasses:

Table 3.1: Control of perennial grass species

Botanical	Common	Dosage rate			
name	name	kg / ha	% Solution*	Remarks	
Cynodon dactylon	Common couch grass	3.0	1.2	Summer rainfall region: Apply to active growth in autumn or summer. Follow-up application in summer at 2.1 kg per hectare. If re-growth occurs, spray with a 1.3 % solution.	
	Ü	4.6		Winter rainfall region: Apply as above in autumn.	
Eragrostis curvula	Weeping love grass	1.0 2.1	0.4 0.8	Only grass that germinated from seeds, i.e. not grass tufts. Apply on to actively growing plants in summer or autumn.  Seedlings.  Up to 60 cm height.	
Paspalum dilatatum	Common Paspalum	3.0	1.2	Apply on active growing plants. Follow-up with half the recommended dosage rate if re-growth occurs	
Paspalum paspalodes	Couch Paspalum	3.0	1.2	Apply in summer at flowering but before seed drop. If re-growth occurs, spray with a 1.2 % solution or 2.1 kg per hectare. Apply the higher rate in the winter rainfall region.	
Panicum maximum	Common buffalo grass	2.1	0.8	Apply in summer to actively growing plants in the early growth stage. If re-growth occurs, spray with a 0.8 % solution.	
Pennisetum clandestinum	Kikuyu	2.1	0.8	Apply in summer to actively growing plants. If regrowth occurs, spray with a 0.8 % solution.	
Setaria megaphylla	Bush buffalo grass	3.1	1.2	Apply to actively growing plants in autumn or summer. If re-growth occurs, spray with a 0.8 % solution.	
Sorghum halepense	Johnson grass	2.1	0.8	Apply in summer or autumn. If re-growth occurs, spray with a 0.8 % solution.	
Sorghum verticilliflorum	Common wildsorghu m	1.0	0.4	Apply to actively growing plants in summer or autumn.	
Stipa trichotoma	Nassela tussock	2.1	0.8	Apply in winter using high water volumes. If regrowth occurs, spray with a 1.0 % solution.	

<sup>\*</sup> Based on knapsack application delivering 250 litres spray mixture per hectare. Application of a % solution with a knapsack sprayer must be calibrated such that it will equal the delivery of the corresponding litres per hectare dosage rate.

GLYGRAN 710 SG PAGE 21 OF 28

#### 3.2 Nutsedges:

Table 3.2: Control of nutsedges

Botanical	Common	Dosage rate		Domorko
name	name	kg / ha	% Solution*	Remarks
Cyperus esculentus	Yellow nutsedge		1.2	Apply in summer at pre-flowering stage. If regrowth occurs, spray with a 0.8 % solution or
Cyperus rotundus	Purple nutsedge	0.0	1.2	1.5 kg per hectare (best results in Feb / March).

<sup>\*</sup> Based on knapsack application delivering 250 litres spray mixture per hectare. Application of a % solution with a knapsack sprayer must be calibrated such that it will equal the delivery of the corresponding litres per hectare dosage rate.

Table 3.3: Improved consistency of Yellow nutsedge (Cyperus esculentus) control

Purpose of Application	Dosage rate kg / ha
Improved consistency of Yellow nutsedge ( <i>Cyperus</i> esculentus) control in <b>Glyphosate tolerant maize</b>	1.3
with a tank mixture with Halo 750 WDG/Crown 750 WDG.	PLUS
	50 g <b>Halo 750 WDG/Crown 750 WDG</b>

- Add A Villa approved Ammonium sulphate adjuvant and 0.05 % Villa 51 to the tank mixture.
- Refer to the "REMARKS" above.
- Refer to the **Halo 750 WDG/Crown 750 WDG** label for **USE RESTRICTIONS** and **DIRECTIONS FOR USE** and list of additional weeds controlled by this product.

GLYGRAN 710 SG PAGE 22 OF 28

#### 3.4 Noxious Weeds:

Table 3.4: Control of noxious plant species

Botanical	Common	Dosage rate			
name	name	kg / ha	% Solution	Remarks	
Acacia mearnsii	Black wattle	1.5	0.8 to1.0	Apply in summer to young trees ranging from 0.1 to 1.5 m high.	
Acacia saligna	Port Jackson willow	1.0 to 2.0	0.8	Apply in autumn or spring.  Seedlings only:  Bipinnate leaf stage = 1.0 kg per hectare. Up to 60 cm high = 2.1 kg per hectare.	
Caesalpinia decapetala	Mauritius thorn	1.5	0.6	Apply in summer by knapsack sprayer.	
Chromolaena odorata	Paraffin weed		0.5	Slash re-growth in winter if necessary. Apply in summer to new growth when more than 0.5 m high.	
Convolvulus arvensis	Field bindweed	3.1	1.2	Apply in summer at onset of flowering. If re-growth occurs spray with a 0.8 % solution.	
Lantana camara	Common Lantana	3.1	1.2	Slash large bushes in winter if necessary. Apply on active growth in summer.	
Opuntia ficus-indica	Prickly pear		16.5	For trees with 20 to 250 cladodes: Drill 4 to 12 holes in the stem and inject 3 mℓ of a 16.5 % solution per hole.	
Phytolacca heptandra	Ink berry	1.5	0.8	Apply in summer by knapsack sprayer.	
Plantago lanceolata	Narrow- leaved ribworth	1.5	0.8	Apply in spring before flowering.	
Prosopis glandulosa	Mesquite tree	-	1.5 to 2.5	Foliar applications: Apply to seedlings 1 to 2 m high. Seedlings should be actively growing and should not show any signs of wilting or any other stress. Seedlings should have enough foliage before spraying.  Coppice applications: Coppice should not exceed 1 m height. The coppice should be well foliated before spraying. The coppice should be actively growing and should not show any signs of wilting or any other stress. Care should be taken to wet the coppice thoroughly on the outside as well as on the inside of the canopy.  General: Control will only be for a year (one season). Provision should be made to treat escapes, coppice developments and new seedlings in the following year.	
Rubus cuneifolius	American bramble	3.0	1.5 2.0	Slash rank growth in winter. Apply in autumn or summer when new growth is more than 0.5 m high. If re-growth occurs, spray with a 0.8 % solution. Knapsack sprayer.  Mist blower.	
Sesbania punicae	Red Sesbania	1.5	0.8	Seedling plants less than 1 m high: Use a 0.8 % solution.  Tall shrubs: Slash, spray re-growth with a 0.8 to 1.0 % solution at 1 m high.	
Solanum mauritianum	Bugweed	1.0	0.8	Apply in spring or summer.  Large trees: Cut to 50 cm, allow new growth of at least 50 cm before application.  Saplings: Apply directly to foliage.	

GLYGRAN 710 SG PAGE 23 OF 28

#### 4. SPECIALISED PRACTICES

#### FORESTRY AND INDUSTRIAL WEED CONTROL

Table 4.1: Dosage rates for weed control in forestry

<u>Table 4.1:</u> Dosag	e rates for week	a Control II	Dosage ra	te	
Situation	Weed species	kg/ha	% Solution (kg in 100 t water)*	Spot spraying (kg in 100 t water)**	Remarks
	Acacia mearnsii (Black wattle)	1.5	0.6	0.8 to 1.0	Apply to young trees from 0.1 to 1.5 m high. Apply the lower dosage rate on trees up to 1.0 m height.
Maintenance weed control in established forests	Solanum mauritianum (Bugweed)	1.0	0.4	0.8	Large trees: Cut to 50 cm, allow new growth of at least 50 cm before application.  Saplings: Apply directly to foliage.
10.03.0	Rubus spp. (Bramble)	3.0	1.2	0.8	Cut and remove lush growth in winter. Apply when new growth is more than 0.5 m high. If re-growth occurs, spray with a 0.8 % solution.
Firebreaks Firebreaks Firebreaks preparation, either tracer belts or total area.  Band preparation for tree seedlings Situations suitable for such treatments include: a) Virgin veld b) Clear felled forests	In both situations the weed population would include perennials and annuals.  For some of the weeds controlled refer to the list under Industrial weed control.	2.1	1.0	1.1	A minimum of 250 litres spray mixture per hectare must be applied when using the 1.0 % solution.  A follow-up treatment may be necessary to control some hardy perennials using a 1.1 % solution on a spot spray basis.
	Single stem stumps	2.5 % solution			Apply a 50 mℓ solution to a clean cambium area immediately after felling.
Eucalyptus grandis (Blue gum)	Multi-stem stumps	3.5 % solution			Apply a 100 mℓ solution to a clean, fully exposed cambium layer immediately after felling. If regrowth occurs, spray with a 1.0 % solution.

<sup>\*</sup> Based on knapsack application delivering 250 litres spray mixture per hectare. Application of a % solution with a knapsack sprayer must be calibrated such that it will equal the delivery of the corresponding litres per hectare dosage rate.

GLYGRAN 710 SG PAGE 24 OF 28

<sup>\*\*</sup> Where spot spraying is done using a percentage solution, apply as a full cover application (but not to point of run-off).

Гable 4.2: Dosage ra		Dosa							
Botanical name	_ Common   %			Remarks					
	name	kg/ha	Solution*						
Perennial grasses:									
Cynodon dactylon	Common couch grass	3.0	1.2	Apply to vigorously growing plants in summer or autumn when nutrients are					
Cynodon nlemfuensis	East African grass	3.0	1.2	actively translocated to roots, rhizomes and stolons. Follow-up with 2.1 kg per hectare (a 1.3 % solution) if any re-growth occurs.					
Pennisetum clandestinum	Kikuyu	2.1	1.0	Spray on active growth in summer. Spray re-growth with 2.0 kg per hectare or a 0.8 % solution.					
Paspalum paspalodes	Couch Paspalum	3.0	1.2	Apply on active growing plants.					
Paspalum dilatatum	Common Paspalum	3.0	1.2	Follow-up with half the recommended dosage rate if re-growth occurs.					
Nutsedges:	ı			1					
Cyperus esculentus	Yellow nutsedge	3.0	1.2	Apply during flowering stage. Spray re-growth with 2.0 kg per hectare or					
Cyperus rotundus	Purple nutsedge	3.0	1.2	a 0.8 % solution.					
Annual broadleaf we	eds:								
Amaranthus	Cape								
hybridus	pigweed								
Amaranthus	Thorny								
spinosus	pigweed								
Argemone subfusiformis	White flowered mexican poppy			Use 2.1 kg per hectare (a 0.8 % solution)					
Bidens bipinnata	Spanish black jack			when weeds are in the early growth stages.					
Bidens pilosa	Black jack			Use 2.7 kg per hectare (a 1.1 % solution)					
Chenopodium	White			when weeds are in the early flowering					
album	goosefoot	0.4.10.0	0.04-4.0	stage.					
Conyza floribunda**	Tall fleabane	2.1 to 3.0	0.8 to 1.2	Lice 2.0 kg per heaters (s. 1.2.0/ solution)					
Datura ferox	Large thorn apple			Use 3.0 kg per hectare (a 1.2 % solution) when weeds are in the seeding stage, but still actively growing.					
Datura stramonium	Thorn apple			Sun douvery growing.					
Oxalis pes-caprae	Yellow sorrel			Do not apply on to matured weeds that are					
Polygonum	Prostrate			in a stage of desiccation.					
aviculare	knotweed			3					
Richardia	Tropical								
brasiliensis	richardia								
Senecio ilicifolius	Ragwort								
Schkuhria pinnata	Dwarf marigold								
Tagetes minuta	Khaki weed			 ay mixture per hectare. Application of a %					

Based on knapsack application delivering 250 litres spray mixture per hectare. Application of a % solution with a knapsack sprayer must be calibrated such that it will be equal to the corresponding litres per hectare dosage rate (NOTE - where spot spraying is done, using a percentage solution, apply as a full cover application (but not to the point of run-off).

GLYGRAN 710 SG PAGE 25 OF 28

Even at higher rates, the control of Conyza species may be variable, necessitating a follow-up application.

#### **SUGARCANE**

Table 4.3: Weed control in sugarcane

Situation	Dosage rate	Remarks
Last ratoon eradication (minimum tillage)	4.10 to 5.20 kg / ha	GLYGRAN 710 SG will effectively kill the last ratoon sugarcane after it has been harvested and allowed to re-grow to a height of + 45 cm, when tillering is complete.  Spray actively growing sugarcane when tillers have emerged, using 100 to 400 litres per hectare. Regrowth can be removed by hand.  Contact your distributor for detailed information on all aspects of minimum tillage before spraying.
Spot eradication of diseased plants	5 % solution	For spot eradication of diseased (e.g. smut) and Off- type cane stools. Apply as a directed spray on the target plant foliage.
Pre-plant	Annual weeds: 0.52 to 1.55 kg / ha Perennial weeds: Refer Table 1.	Apply on to actively growing weeds.
Spot spraying fields	1 % solution	Direct spot spraying on to actively growing weeds around fields, telephone poles, etc.

#### 5. PASTURE RENOVATION

Table 5.1: Pasture renovation

Table 5.1. Pasture removation			
Situation	Remarks		
Conventional Perennial running grass infestation:	Mechanical and chemical renovation:		
Light pressure	Prepare seedbed. Allow perennial running grass and annual weeds to emerge. Apply <b>GLYGRAN 710 SG</b> at the recommended dosage rates for the weeds (Table 2). Sow new pasture 3 to 4 days after spraying.		
Heavy pressure	Cultivate weeds and allow for re-growth. Apply the recommended rate of <b>GLYGRAN 710 SG</b> . Allow for one week after spraying before a second cultivation, seedbed preparation and planting / sowing.		
Pre-sowing weed control	New germinating weeds can be controlled with 0.52 to 1.55 kg per hectare. <i>Cyperus</i> spp. (Nutsedge) will require 3.0 kg per hectare. Sow new pasture 3 to 4 days after application.		
Pasture replacement and field improvement	Reduce trash by mowing or heavy grazing 3 to 4 weeks prior to application of <b>GLYGRAN 710 SG</b> on re-growth. Plant new pasture 3 to 4 days after application.		
Pasture maintenance	Control perennial and annual weeds in pastures by spot spraying with a 1 % solution or using wipe type equipment where weeds project above the pasture (Table 2).		

#### **NOTES**

- Refer to the recommended dosage from the **Tables** above to control annual and perennial weeds during renovation of established pastures.
- Use conventional or direct drill planting methods.
- Ensure that rank weed growth does not prevent spray coverage on the target area.
- Do not spray on to heavy growth of Kikuyu or Common quick grass with a reduced green leaf area. Burn at the end of winter to reduce dry mass. Allow re-growth during summer and spray re-growth late summer or spring. Establish new pasture in the autumn thereafter.

GLYGRAN 710 SG PAGE 26 OF 28

#### 6. WIPE TYPE APPLICATION

Table 6.1: Wipe type application

Type of applicator	% Solution	Remarks
Handheld roller applicators	Annuals: 2.5 % Perennials: 5.0 %	100 to 150 litres per hectare solution recommended where conventional spraying is not practical, i.e., low trellised or bush vines, etc.
Handheld or tractor mounted rope wick applicator	25 %	Apply up to 3 litres per hectare dosage rate solution in orchards and where weed/crop height differentiation exists, e.g., control of volunteer crop or resistant late germinating weeds in beans and groundnuts.

#### **NOTES**

- Use an approved wipe type applicator. These applicators make use of an absorbent material to transfer the **GLYGRAN 710 SG** solution on to plants with which the applicator comes into contact.
- Ensure that the wiper surface is kept clean. The wiper must **not** come into contact with the crop.

Consult all products labels mentioned in this label for **WARNINGS**, **PRECAUTIONS**, **USE RESTRICTIONS**, **DIRECTIONS FOR USE** and **DOSAGE RATES**.

The following products mentioned in this label are equivalent to the products mentioned below:

- CANTRON® 480 SC (L 8365 / N-AR 1323 / W 130651) = ASTRON® 480 SC (L 8366) = CANONNE 480 SC (L 8735) = SUNTRON 480 SC (L 10155) (Mesotrione),
- VELOCITY® SUPER (L 9603 / W 130996) = AMS-SUPER (L 9758),
- VELOCITY® DRYMAX (L 9454 / W 130995 / N-AR 1528) = AMS-GRANULE (L 9610),
- VILLA 51 (L 8050 / W 130454 / N-AR 1090) = WEN 51 (L 8315),
- CROWN 750 WDG (L 8282) = HALO 750 WDG (L 8283 / N-AR 1337) (Halosulfuron),
- PREMIUM 840 EC (L 8066) = LEAP 840 EC (L 8064 / N-AR 1103) (Acetochlor),
- METOLACHLOR 800 EC (L 7433) = METOLACHLOR 800 EC (L 7137),
- METOLACHLOR 915 EC (L 7841 / N-AR 1361) = PLATINUM PLUS 915 EC (L 7844),
- MCPA 400 SL (L 5795 / W 130452) = MCPA 400 SL (L 5793 / N-AR 1092),
- ROCKET 750 WSG (L 9737) = MORTAR 750 WSG (L 9738) (MCPA),
- FLUMETSULAM 800 WDG (L 8062) = LAUREL 800 WDG (L 8061 / N-AR 1339),
- TERBUCIDE 600 WDG (L 8799 / W 1301046) = TERBUWEED 600 WDG (L 8800) = TERBUMAIS 600 WDG (L 8798) (Terbuthylazine),
- METOLACHLOR 960 EC (L 7136 / W 130057) = PLATINUM 960 EC (L 7434 / N-AR 1108),
- PENTIUM PLUS 915 EC (L 9741) = PALLADIUM PLUS 915 EC (L 9359 / W 1301000) = PARTISAN PLUS 915 EC (L 9942)
- LEXUS 480 SL (L 9598) = LOTUS 480 SL (L 9599) (Dicamba),
- STYLE 750 WDG (L 9157) = ELEGANCE SUPER 750 WDG (L 9158).
- SUMMIT SUPER (L 8539) = BENEFIT PLUS (L 8538),
- LINK (L 8675) = DIRECT (L 8680),
- CORVETTE 425 SC (L 8323 / N-AR 1322 / W 130650) = CRUX 425 SC (L 8325) (Sulcotrione & Atrazine).
- TRADE 700 WDG (L 9228) = TRANSFER 700 WDG (L 9227) (Dicamba),
- BRASS 200 SL (L 9279) = BOUND 200 SL (L 9280 / N-AR 1735 / W 1301405),
- BRASS DRY 880 WSG (L 10941) = BOUND DRY 880 WSG (L 10940) and

CANTRON® 480 SC, LEAP 840 EC, METOLACHLOR 800 EC, PLATINUM PLUS 915 EC, HALO 750 WDG, LAUREL 800 WDG, TERBUWEED 600 WDG, MCPA 400 SL, SUNTRON 480 SC, PLATINUM 960 EC, PALLADIUM PLUS 915 EC, MORTAR 750 WSG, FORWARD 100 EC, TRANSFER 700 WDG, LOTUS 480 SL, DIRECT, SUMMIT SUPER, BENEFIT PLUS, CRUX 425 SC, HALO 750 WDG, BOUND 200 SL and BOUND DRY 880 WSG are registered products of VILLA CROP PROTECTION (PTY) LTD.

VELOCITY® SUPER, VELOCITY® DRYMAX, AMS-SUPER, AMS-GRANULE, LINK, PREMIUM 840 EC, ASTRON® 480 SC, METOLACHLOR 800 EC, METOLACHLOR 915 EC, 2,4-D AMINE 480 SL,

GLYGRAN 710 SG PAGE 27 OF 28

FLUMETSULAM 800 WDG, TERBUCIDE 600 WDG, MCPA 400 SL, METOLACHLOR 960 EC, PENTIUM PLUS 915 EC, PARTISAN PLUS 915 EC, TRADE 700 WDG, LEXUS 480 SL, CORVETTE 425 SC, CROWN 750 WDG, BRASS 200 SL, STYLE 750 WDG, ELEGANCE SUPER 750 WDG, BRASS 200 SL, BRASS DRY 880 WSG, WEN 51, VILLA 51 and ROCKET 750 WSG are registered products of UNIVERSAL CROP PROTECTION (PTY) LTD.

CANONNE 480 SC and TERBUMAIS 600 WDG are registered products of CROPASURE (PTY) LTD.

CANTRON®, ASTRON®, VELOCITY® SUPER and VELOCITY® DRYMAX are registered trademarks of VILLA CROP PROTECTION (PTY) LTD.

INTERLOCK® and CLASS ACT® NG are registered trademarks of WINFIELD SOLUTIONS REGISTRATION HOLDINGS (PTY) LTD.

GLYGRAN 710 SG PAGE 28 OF 28