

Glyphos 360 SL

South Africa Reg. No: L 10134 Act/Wet No. 36 of/van 1947



GLYPHOS 360 SL is a non-selective post-emergence herbicide solution for the control of annual and perennial weeds as indicated on the label.

ACTIVE INGREDIENT

Glyphosate (glycine) 360 g a.e./ℓ
(glyphosate isopropylamine salt) 480 g/ℓ

GROUP 9 HERBICIDE



WARNING

HAZARD STATEMENTS: Harmful if swallowed | Causes serious eye irritation
May be harmful if inhaled | Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS: Obtain special instruction before use
Do not handle until all safety precautions have been read and understood
Avoid breathing mist, vapours and spray | Use only outdoors or in a well-ventilated area | Avoid release into the environment.

Registration holder: Green Island Investments (Pty) Ltd.
Co. Reg. No.: 2013/043963/07
P.O. Box 1822, Heidelberg 1438, South Africa
Tel: 078 737 9236

24 HR EMERGENCY NUMBERS

Griffon Poison Information Centre: +27 82 446 8946
24 Hr Transport / Spill emergency no:
(Hazcall24) +27 86 044 4411 (Typhoon Plant Protection)

Distributed by: Typhoon Plant Protection (Pty) Ltd.
Co. Reg. No.: 1998/006156/07, C/O Farm Vlakfontein
Corner of the R23 Benoni Road & R550 Nigel Road
Brakpan District, Heidelberg 1438, Gauteng, South Africa
Tel: 078 737 9236

Net Volume:

ℓ

Expiry Date:
Batch No:
Date of Manufacture:
U.N. No. 3082

**Typhoon**
PLANT PROTECTION

READ LABEL IN DETAIL BEFORE OPENING THE CONTAINER. FOR FULL PARTICULARS, SEE ENCLOSED LEAFLET.
KEEP OUT OF REACH OF CHILDREN AND ANIMALS.



WARNINGS:**Withholding periods:**

Allow the following number of days between the last application and harvest or grazing:	
Maize (Grazing)	28 days
Maize (Green mealies)	42 days

WARNINGS:**HAZARD STATEMENTS:**

- Harmful if swallowed.
- Causes serious eye irritation.
- May be harmful if inhaled.
- Very toxic to aquatic life with long lasting effects.
- Handle product with caution.
- Irritating to eyes and skin.
- Harmful when swallowed.
- **Do not** mix, store or apply **GLYPHOS 360 SL** solutions in galvanised steel or unlined steel (except stainless steel) containers or spray tanks, as 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: GLYPHOS 360 SL is a highly active herbicide, that in small quantities, when used incorrectly can cause serious damage to crop seedlings, deciduous fruit trees and grape vines 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 grape vines in budding or early development stages are present within 5 km of the nearest spray path of the aircraft.

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 weed against the remedy concerned, as well as by the method, time and accuracy of application. The registration holder furthermore 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 the event of any uncertainty.

PRECAUTIONS:

PRECAUTIONARY STATEMENTS:

- Avoid breathing mist, vapours and spray.
 - Wash hands and face thoroughly after handling.
 - Wash hands thoroughly after handling. **Do not** touch eyes.
 - **Do not** eat, drink or smoke when using this product.
 - Use only outdoors or in a well-ventilated area.
 - Avoid release into the environment.
 - Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
 - In case of inadequate ventilation wear respiratory protection.
 - **IF SWALLOWED:** Immediately call a **POISON CENTER**.
 - **IF SWALLOWED:** Get emergency medical help immediately.
 - **IF ON SKIN:** Wash with plenty of water and non-abrasive soap.
 - **IF INHALED:** Remove person to fresh air and keep comfortable for breathing.
 - **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - Immediately call a **POISON CENTER**.
 - Collect spillage.
 - Store in a well-ventilated place. Keep container tightly closed.
 - Store locked up.
 - Dispose of content/container to suitable landfill in accordance with local regulations.
- Direct or spray drift contact by **GLYPHOS 360 SL** onto leaves and/or immature bark of desired plants can result in serious localised or translocated damage.
 - Clean application equipment after use and **do not** dispose of wash water where it can contaminate other crops, grazing, boreholes, rivers or dams.
 - **TRIPLE RINSE** empty containers in the following manner: Invert the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to a minimum of 10 % of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner.

Related ingredients:

Substance name (IUPAC)	CAS - No.	Concentration % By weight
	EC - No.	
Glyphosate %	1071-83-6	36%
Isopropyl Amine	75-31-0	10-15%

SYMPTOMS OF HUMAN POISONING:

Acute toxicity to this herbicide is expected to be low and no adverse effects from exposure have been reported. Skin contact, ingestion and inhalation are likely routes of exposure.

FIRST AID TREATMENT:

Inhalation: Remove source of contamination or move patient to fresh air. Keep patient under observation and obtain medical attention if necessary.

Skin contact: If irritation occurs, remove contaminated clothing, shoes and leather goods. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap.

If irritation persists, obtain medical assistance.

Eye contact: Immediately flush the contaminated eyes with gently flowing clean water for 20 minutes, holding the eyelid(s) open until no evidence of chemical remains. If irritation persists, obtain medical assistance.

Ingestion: Have patient rinse mouth thoroughly with water. **Do not** induce vomiting. In severe cases, obtain medical advice immediately.

RESISTANCE WARNING:

For resistance management, **GLYPHOS 360 SL** is a **Group code G herbicide**. Any weed population may contain individual weeds naturally resistant to **GLYPHOS 360 SL** and other **Group code G herbicides**. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **GLYPHOS 360 SL** or any other **Group code G herbicide**.

In order to delay herbicide resistance:

- Avoid the exclusive and repeated use of herbicides from the same herbicide group code.
- Alternate or tank mix with products from different herbicide group codes.
- Integrate chemical and cultural control methods into weed control programmes.

USE RESTRICTION:

- When using **GLYPHOS 360 SL** as a land preparation for transplanted tomatoes, tobacco or any other transplanted crop with green and soft stems, allow a minimum of 14 days between application and transplanting of seedlings.
- This product should only be used as a post emergent broadcast (over-the-top) application or as a directed spray on maize varieties which contains the glyphosate resistant gene.
- Maize and cotton hybrids or varieties that **do not** contain the glyphosate resistant gene will be severely injured or killed when sprayed with this product.
- **Do not** add foliant nutrients to **GLYPHOS 360 SL**.

DIRECTIONS FOR USE: Use only as directed.

- I. Use only clean water in spray mixture.
- II. Always ensure that spray equipment is clean, and correctly calibrated before spraying.
- III. Use low spray pressure (100–200 kPa) to avoid spray drift.
- IV. **GLYPHOS 360 SL** is actively absorbed through immature bark and leaves of most plants and trees. Contact with immature bark, such as in trees younger than three years, can result in serious localised or translocated damage. **THEREFORE CONTACT WITH LEAVES, GREEN OR IMMATURE BARK AND FRUIT OF DESIRED PLANTS, WHETHER DIRECT OR BY SPRAY DRIFT, MUST BE AVOIDED. ALWAYS MAKE SURE THAT ONLY UNDESIRED PLANTS ARE TREATED. Do not** spray onto pruned vines or fruit trees until wounds have sealed properly. **GLYPHOS 360 SL** is a non-selective systemic herbicide and is only active when applied to the green foliage and bark of plants. The visible effect of **GLYPHOS 360 SL** on treated foliage usually appears at 10–14 days after treatment but may vary according to weather conditions. **GLYPHOS 360 SL** should be applied to actively growing weeds that are not dormant or under temperature or moisture stress. Rain or irrigation a few days prior to a **GLYPHOS 360 SL** application ensures that weeds are actively growing, resulting in optimum efficacy. Rain or irrigation within 6 hours of application can reduce **GLYPHOS 360 SL** efficacy. **Do not** spray on weed foliage covered with a layer of dust. In these situations apply after recent rain. **GLYPHOS 360 SL** has **NO pre-emergence** activity, therefore repeat applications are necessary (when applied on its own) to control weeds germinating from seed. Ensure that target weeds are fully exposed to the **GLYPHOS 360 SL** spray.
- V. See also the section “**MAIZE VARIETIES CONTAINING THE GLYPHOSATE RESISTANT GENE**”.

MIXING INSTRUCTIONS:

Half-fill the spray tank with clean water and add the required quantity of **GLYPHOS 360 SL**. Then fill the tank to the required volume with clean water, ensuring thorough agitation. When using tank mixes, the additional herbicide should be added after **GLYPHOS 360 SL** and agitation must be continuous before and during spraying.

APPLICATION:

Ensure that the application equipment is clean and free from rust and dust. Remove sediments e.g. residues of WP pesticides from spray tanks before adding **GLYPHOS 360 SL**. Avoid the use of hard or muddy water, or water with a high colloidal content derived from soils high in organic matter. Correctly calibrate all sprayers under field conditions prior to application. It is not necessary to spray to the point of run-off, but essential to ensure complete coverage of the target weed. **EVEN APPLICATION IS ESSENTIAL FOR GOOD RESULTS.**

Ground application:

GLYPHOS 360 SL can be applied with conventional ground equipment (tractor mounted booms, knapsack etc). Optimum spray deposits are obtained with ground equipment calibrated to spray 30–600 l/ha with suitable nozzles to ensure adequate coverage. Where drift is a problem **do not** exceed 2 Bar. Use only the pressures recommended for specific nozzles to avoid drift. See also the section “**MAIZE VARIETIES CONTAINING THE GLYPHOSATE RESISTANT GENE**”.

Aerial application:

Aerial application of **GLYPHOS 360 SL** may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of South African National Standard 10118: The Aerial Application of 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:

- **Volume:** a spray mixture volume of 30 to 35 ℓ 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.
- **Droplet coverage:** 30 to 40 droplets per cm² must be recovered at the target area.
- **Droplet size:** a droplet spectrum with a VMD of 300 to 350 microns is recommended. Limit the production of fine droplets less than 150 microns (high drift and evaporation potential) to a minimum.
- **Flying height:** 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 **atomising equipment** 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**.
- The difference in **temperature** 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/h.
- Stop spraying under **turbulent**, unstable and dry conditions during the heat of the day.
- Spraying under temperature **inversion conditions** (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80 % and above) may lead to the following:
 - o reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage).
 - o 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:

GLYPHOS 360 SL will control most emerged annual weeds germinating from seed in situations such as fallow land, pre-plant of crops, reduced or conservation tillage, perennial vine and tree crops, crops varieties with the glyphosate resistant gene and industrial areas.

Apply the **GLYPHOS 360 SL** dosage rate according to the weed growth stage. The higher dosage rates within the range should be used when the weeds are older and more established in the specific growth stage.

1. CONTROL OF PERENNIAL WEEDS

1.1 NOXIOUS WEEDS		DOSAGE RATE		REMARKS
BOTANICAL NAME	COMMON NAME	ℓ/ha	% Soln	
<i>Sesbania punicea</i>	red Sesbania	3,0	1,5	Seedling plants less than 1 m high: use 1,5 % solution. Tall shrubs: slash, spray re-growth with 1,5–2,0 % solution at 1 m high.
<i>Solanum mauritianum</i>	bugweed	2,0	1,5 0,5	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.
<i>Acacia dealbata</i>	silver wattle		20,0	Summer application. Applied to low cut stumps, cut 10 cm above ground level. Freshly cut stumps must be sprayed to the point of run-off. Spray must be directed to the cambium layer and exposed bark.
<i>Mimosa pigra</i>	giant sensitive plant	6,0	3,0	Apply to foliar part of seedlings and plants up to 1 m in height.
<i>Chromolaena odorata</i>	trifid weed	1,0	1,0	Apply in summer and autumn. Slash established plants and allow to regrow. Spray when regrowth is between 50 and 120 cm. Ensure complete coverage of foliage. Previously slashed multisystem plants may require a follow up treatment.

1.2 GRASSES		DOSAGE RATE		REMARKS
BOTANICAL NAME	COMMON NAME	ℓ/ha	% Soln	
<i>Cynodon dactylon</i>	common couch	6,0		Summer rainfall region. Apply to active growth in autumn or summer. If re-growth occurs, spray with 2,5 % solution.
		9,0		Winter rainfall region. As above in autumn.
<i>Eragrostis curvula</i>	weeping love grass	3,0	1,5	Apply to active growth in summer or autumn.
<i>Paspalum dilatatum</i>	common Paspalum	6,0	3,0	Apply in summer at flower but before seed drop. If re-growth occurs, spray with 1,5 % solution.
<i>Paspalum paspalodes</i>	couch Paspalum	8,0-9,0		Apply in summer at flowering but before seed drop. If re-growth occurs, spray with 2 % solution or 4 ℓ/ha. Apply the higher rate in the winter rainfall region.
<i>Panicum maximum</i>	common buffalo grass	6,0	3,0	Apply in summer to actively growing plants in the early growth stage. If regrowth occurs, spray with 1,5 % solution.
<i>Pennisetum clandestinum</i>	kikuyu	4,0	1,5	Apply in summer to actively growing plants. If regrowth occurs, spray with 1,5 % solution.
<i>Setaria megaphylla</i>	bush buffalo grass	6,0	3,0	Apply to actively growing plants in autumn or summer. If regrowth occurs, spray with 1,5 % solution.
<i>Sorghum halepense</i>	Johnson grass	4,0	2,0	Apply in summer or autumn. If regrowth occurs, spray with 1,5 % solution.
<i>Sorghum verticilliflorum</i>	common wild-Sorghum	3,0	1,5	Apply to actively growing plants in summer or autumn.

1.3 SEDGES		DOSAGE RATE		REMARKS
BOTANICAL NAME	COMMON NAME	ℓ/ha	% Soln	
<i>Cyperus esculentus</i> <i>Cyperus rotundus</i>	yellow nutsedge	6,0		Apply in summer at pre-flowering stage. If regrowth occurs, spray with 1,5 % solution or 3,0 ℓ/ha. (best results in Feb/March).
	purple nutsedge	6,0		

2. CONTROL OF ANNUAL WEEDS

2.1. Broadleaf weeds

The following broadleaf weeds will be controlled at the rates and growth stages as indicated below.

GLYPHOS 360 SL ℓ/ha					
1,0–2,0		2,0		3,0	
1–12 leaf		12 leaf to pre-bloom		Flowering	
<i>Alternanthera pungens</i>	khaki bur weed	<i>Conyza albida</i>	tall fleabane		
<i>Amaranthus hybridus</i>	Cape pigweed	<i>Cucumis spp</i>	wild cucumber		
<i>Amaranthus spinosus</i>	thorny pigweed	<i>Datura ferox</i>	large thorn apple		
<i>Amaranthus thunbergii</i>	red pigweed	<i>Datura stramonium</i>	thorn apple		
<i>Arctotis venusta</i>	Free State daisy	<i>Galinsoga parviflora</i>	gallant soldier		
<i>Argemone subfusiformis</i>	Mexican poppy	<i>Gisekia pharmaceoides</i>	Gisekia		
<i>Bidens pilosa</i>	blackjack	<i>Gnaphalium subfalcatum</i>	cudweed		
<i>Chenopodium album</i>	white goosefoot	<i>Lepidium africanum</i>	pepper cress		
<i>Chenopodium ambrosioides</i>	American goosefoot	<i>Pentzia grandiflora</i>	stinkweed		
<i>Chenopodium carinatum</i>	green goosefoot	<i>Physalis angulata</i>	wild gooseberry		
<i>Chenopodium murale</i>	nettle-leaved goosefoot	<i>Pseudognaphalium luteo-album</i>	Jersey cudweed		
<i>Cirsium arvense</i>	Canada thistle	<i>Richardia brasiliensis</i>	tropical Richardia		
<i>Citrullus lanatus</i>	bitter apple	<i>Spergula arvensis</i>	corn spurry		

2.2. Grasses

The following grasses will be controlled at the rates and growth stages as indicated below.

GLYPHOS 360 SL ℓ/ha			
1,5–3,0		3,0	
1 leaf to pre-bloom		Flowering	
<i>Avena fatua</i>	common wild oats	<i>Lolium multiflorum</i>	Italian rye grass
<i>Avena spp</i>	wild oats	<i>Lolium temulentum</i>	darnel
<i>Briza maxima</i>	quaking grass	<i>Panicum schinzii</i>	sweet buffalo grass
<i>Bromus diandrus</i>	riggut brome	<i>Poa annua</i>	winter grass
<i>Ehrharta longifolia</i>	oat-seed grass	<i>Rhynchelytrum repens</i>	Natal red-top
<i>Eleusine coracana</i>	goose grass	<i>Secale cereale</i>	rye
<i>Eragrostis curvula</i>	weeping love grass	<i>Sorghum bicolor</i>	wild grain-Sorghum
<i>Hordeum murinum</i>	wild barley	<i>Tragus racemosus</i>	large carrot-seed grass

2.3. Broadleaf weeds and grasses

GLYPHOS 360 SL ℓ/ha					
1,5–2,0		2,0–3,0		3,0–4,0	
1–12 leaf		12 leaf to pre-bloom		Flowering	
<i>Arctotheca calendula</i>	Cape marigold	<i>Phalaris minor</i>	little seeded canary grass		
<i>Chamaesyce hirta</i>	red milkweed	<i>Portulaca oleracea</i>	common purslane		
<i>Chamaesyce inaequilatera</i>	smooth creeping milkweed	<i>Raphanus raphanistrum</i>	wild radish		
<i>Chloris virgata</i>	feathertop Chloris	<i>Schkuhria pinnata</i>	dwarf marigold		
<i>Commelina benghalensis</i>	wandering Jew	<i>Senecio burchellii</i>	molteno-disease Senecio		
<i>Conyza canadensis</i>	Canadian fleabane	<i>Sesamum triphyllum</i>	wild sesame		
<i>Conyza albida</i>	tall fleabane	<i>Setaria pallide-fusca</i>	red bristle grass		
<i>Coronopus didymus</i>	swine cress	<i>Setaria verticillata</i>	sticky bristle grass		
<i>Crotalaria sphaerocarpa</i>	mealie Crotalaria	<i>Sonchus oleraceus</i>	common sowthistle		
<i>Emex australis</i>	spiny emex	<i>Tagetes minuta</i>	tall khaki weed		
<i>Fumaria muralis</i>	fumitory	<i>Tribulus terrestris</i>	common dubbeltjie		
<i>Hibiscus cannabinus</i>	kenaf	<i>Veronica spp.</i>	Veronica		
<i>Hibiscus trionum</i>	bladderweed	<i>Zea mays</i>	volunteer maize		
<i>Ipomoea purpurea</i>	common morning glory	<i>Triticum spp.</i>	volunteer wheat		
<i>Paspalum urvillei (seedlings)</i>	tall Paspalum				

2.4. Broadleaf weeds and grasses

GLYPHOS 360 SL ℓ/ha					
2,5–3,0		3,0–5,0		5,0–6,0	
1–12 leaf		12 leaf to pre-bloom		Flowering	
<i>Cleome gynandra</i>	spider-wisp	<i>Plantago lanceolata</i>	narrow-leaved ribwort		
<i>Digitaria sanguinalis</i>	crab finger-grass	<i>Polygonum aviculare</i>	prostate knotweed		
<i>Echinochloa crus-galli</i>	barnyard grass	<i>Sida cordifolia</i>	heartleaf Sida		
<i>Echium lycopsis</i>	Patterson's curse	<i>Solanum nigrum</i>	nightshade		
<i>Hypochoeris radicata</i>	hairy wild lettuce	<i>Urochloa panicoides</i>	garden Urochloa		
<i>Panicum maximum</i>	common buffalo grass	<i>Verbena officinalis</i>	European Verbena		
<i>Paspalum urvillei</i>	tall Paspalum				

2.5. Broadleaf weeds

GLYPHOS 360 SL ℓ/ha					
1,5–6,0		6,0		6,0	
1–12 leaf		12 leaf to pre-bloom		Flowering	
<i>Erodium moschatum</i>	musk heron's bill				

2.6. Broadleaf weeds

GLYPHOS 360 SL ℓ/ha					
6,0		6,0		6,0	
1–12 leaf		12 leaf to pre-bloom		Flowering	
<i>Malva parviflora</i>	small mallow	<i>Oenothera stricta</i>	evening primrose		

2.7. Broadleaf weeds

GLYPHOS 360 SL ℓ/ha					
5,0–6,0		5,0–6,0		5,0–6,0	
1–12 leaf		12 leaf to pre-bloom		Flowering	
<i>Rumex angiocarpus</i>	sheep sorrel				

2.8. Broadleaf weeds

GLYPHOS 360 SL ℓ/ha		
4,0	8,0	3,0 % Solution:
1–12 leaf	12 leaf to pre-bloom	Flowering
<i>Acacia saligna</i>	Port Jackson willow	

Notes

For *Malva parviflora* (small mallow) and *Oenothera stricta* (evening primrose, smaller than 12 leaf stage) control, spray **GLYPHOS 360 SL** at 3,0 ℓ/ha in combination with the recommended **Simazine SC** rate for the soil type.

For problem *Erodium moschatum* (musk heron's bill, low growing type) control in grapevines and deciduous fruit apply 2,0 ℓ/ha **GLYPHOS 360 SL** prior to budburst. Regrowth must be sprayed 4 to 6 weeks later with **Paraquat** plus **Simazine SC**. Refer to Paraquat and **Simazine SC** labels for rates and details.

3. SPECIFIC RECOMMENDATIONS

MAIZE VARIETIES CONTAINING THE GLYPHOSATE RESISTANT GENE

The use of **GLYPHOS 360 SL** on maize varieties containing the glyphosate resistant gene in accordance with the following label directions is expected to result in the normal growth of these crops.

Do not use GLYPHOS 360 SL on maize varieties that do not contain the glyphosate resistant gene since this will result in the severe injury and death of these crops.

- The spray mixture must always contain at least 1.5 % **GLYPHOS 360 SL**.
- When necessary the water volume must be adjusted to achieve 1.5 % spray solution.
- Apply in a maximum water volume of 125 ℓ water/ha.
- Avoid spraying to the point of run-off from the target leaf surfaces.
- This should not be a concern at volumes of 100 to 125 ℓ/ha.
- Use low pressures of 100–150 kPa with appropriate nozzles (e.g. flat fan or twin jet nozzles) to deliver the required water volume and dosage rate per hectare. prevent interference with weed control.

Notes on the use with other herbicides and tank mixes

When other herbicides are used as pre-plant, pre-plant incorporated, pre-emergence and post-emergence treatments in maize and soybean varieties with the glyphosate resistant gene, followed **GLYPHOS 360 SL** applications, the recommendations on the labels of these products must be followed.

Application information

CROP	APPLICATION	REMARKS
3.1 Maize	Overall application. Apply from ground cracking stage up to the V8 stage, when the first plants in a field have 8 leaves with closed collars around the main stem (the actual number of leaves may be more). Application after this stage could result in delayed maturity and/or yield loss. Only apply if the passing of the spray equipment will not cause mechanical damage to the crop.	Where sequential applications are necessary the second application should not occur within 10 days of the first application. If the maize is beyond the V8 stage a directed application will be necessary.
	Directed application. Apply after the V8 stage where row spacing permits the passage of the application equipment without causing mechanical damage to the crop.	Directed applications can be made after the V8 stage where the row spacing permits the passage of the application equipment without causing mechanical damage to the crop. Row spacings of 150 cm and 210 cm is recommended for conventional tractor mounted spray rigs.

Dosage rates

WEEDS	DOSAGE (ℓ/ha)	REMARKS
Annual grasses and broadleaf weeds	2,0	Apply before weeds are 100 mm high.
Annual grasses and broadleaf weeds	2,5	Apply when weeds are between 100 and 200 mm high.
<i>Commelina benghalensis</i> (wandering jew)	2,5	Apply at the three leaf stage followed by a second application of 2,5 ℓ/ha 10–20 days later.
<i>Ipomoea purpurea</i> (morning glory)	2,5	Apply at the three to five leaf stage followed by a second application of 2,5 ℓ/ha 10–20 days later.
<i>Portulaca oleracea</i> (common purslane)	2,5	Apply before flowering.
<i>Cyperus esculentis</i> (yellow nutsedge)	2,5	Apply before plants are 100 mm high.
<i>Cyperus esculentis</i> (yellow nutsedge)	2,5	Apply at the three to four leaf stage followed by a second application of 2,5 ℓ/ha 10–20 days later.

4. SPECIFIC RECOMMENDATIONS

	REMARKS
4.1 Almonds, aloes, apples, apricots, avocados, bananas, blackberry, cherries, citrus, coffee, granadilla, guava, hops, kiwi fruit, litchies, macadamia nuts, mangoes, nectarines, olives, pawpaw, peaches, pears, pecan nuts, pineapples, plums, cactus pear, prunes, quince, tea.	1. See weed tables for dosage rates of GLYPHOS 360 SL . 2. Protect young trees with green bark from direct spray.
4.2 Vines and fruit trees.	Apply before bud burst to vines older than 2 years. Younger vines with green bark should be shielded. Spray should be directed onto weeds. Do not spray onto pruned vines or fruit trees until wounds have sealed properly. Crop cover destruction in grapevines Apply GLYPHOS 360 SL at 1,5–3,0 l/ha. Apply 10 days or more after pruning and before bud burst.
4.3 Sisal.	Applications can be made to nursery and mature plants.
4.4 Arable land.	Use GLYPHOS 360 SL after harvesting of previous crop. Do not disturb target plants before 6 hours after application (before planting of crops) and prior to emergence of new crop.

5. FORESTRY USAGE

SITUATION	WEED SPECIES	DOSAGE RATE		REMARKS
		ℓ/ha	% SOLUTION (ℓ GLYPHOS 360 SL IN 100 ℓ WATER)	
MAINTENANCE IN ESTABLISHED FORESTS	<i>Acacia mearnsii</i> (Black wattle)	3	1,5	Apply to young trees up to 1 m high.
	<i>Solanum mauritianum</i> (Bugweed)	2	1,5 0,5	Large trees: cut to 50 cm, allow new growth of at least 50 cm before application. Saplings: apply directly to foliage.
	<i>Rubus spp</i> (American bramble)	6	3,0	Slash rank growth in winter. Apply when new growth is more than 0,5 m high. If regrowth occurs, spray with 1,5 % solution.
1. Firebreaks Firebreak pre- paration (tracer belts or total area). 2. Band pre- paration for tree seedlings Situations suitable for such treatments include: a) Virgin veld b) Clear felled forests.	In both situations (1 and 2) weed population would include perennials and annuals. Refer to list of some of the weeds controlled.	4	2	A minimum of 200 ℓ spray mixture/ha must be applied when using the 2 % solution. A follow-up treatment may be necessary to control some hardy perennials using a 2 % solution on a spot spray basis.

SITUATION	DOSAGE	REMARKS
<i>Eucalyptus grandis</i> (bluegum) coppice regrowth prevention.	5 % solution.	Single stem stumps. Apply 50 mℓ solution to a clean cambium area immediately after felling.
	7 % solution.	Multistem stumps. Apply 100 mℓ solution to a clean, fully exposed cambium layer immediately after felling. If regrowth occurs, spray with 2 % solution.

6. SUGARCANE LAST RATOON ERADICATION

CROP	DOSAGE	REMARKS
Minimum tillage.	8,0–10,0 ℓ/ha.	Allow regrowth after final harvest to grow up to 0.45–1,0 m in height (tillering stage), then apply the spray mixture in 100–400 ℓ/ha as a post emergence spray on the leaves of the tillers.
Combination tillage.	4,0 – 8,0 ℓ/ha.	Use the higher rate on fertile soils where regrowth might be a problem. Spray the GLYPHOS 360 SL solution on regrowth of the sugarcane when the ratoon cane is about 0,35–1 m in height. Allow 5–10 days application before the cane stool is sheared at a depth of 10–15 cm below soil surface with a blade shear implement or similar implement.
Spot eradication.	10 % solution.	This treatment will also control certain grasses and broadleaf weeds. Apply spray solution directly on cane stools.
Pre-plant land preparation.	1,0 – 3,0 ℓ/ha.	Annual weeds: apply to active growing annual weeds. Perennial weeds: refer to tables under part 1 for details.
Spot spraying around sugarcane field.	2 % solution.	Direct sprays to active growing plants around field in problem areas to be cleaned.