



KALACH 700 WSG

Reg. No.: L8312 Act /Wet No. 36 of/van 1947

**READ ATTACHED PACKAGED LEAFLET BEFORE USE
AND
KEEP OUT OF REACH OF CHILDREN AND ANIMALS**

HRAC HERBICIDE GROUP CODE:

9

HRAC ONKRUIDDODERGROEP KODE:

A water soluble granular non-selective foliar, systemic herbicide for the control of a wide range of annual and perennial grasses and broadleaf weeds, as listed, in agricultural areas. Can also be used to control weeds in maize varieties containing the glyphosate resistant gene.

'n Wateroplosbare korrel nie-selektiewe, blaartoegegediende sistemiese onkruiddoder vir die beheer van verskeie eenjarige en meerjarige grasse en breëblaaronkruide, soos gelys, in landboukundige situasies. Kan ook gebruik word vir die beheer van onkruide in mielievarente wat die glifosaatbestandheids-geen bevat.



DANGER

Hazard Statements

Causes mild skin irritation.
Causes serious eye damage.
Harmful to aquatic life with long lasting effects.

Precautionary Statements

Do not eat, drink or smoke when using this product.
Avoid release to the environment if this is not the intended use.

ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL:

Glyphosate (glycine) / Glifosaat (glisien).....700 g/kg
As glyphosate sodium salt / As glifosaatnatriumsout791 g/kg

Registration holder /Registrasiehouer:

UPL South Africa (Pty) Ltd

Co. Reg. No./Mpy. Reg. Nr.: 2009/019713/07
7 Sunbury Office Park,
Off Douglas Saunders Drive, La Lucia Ridge,
South Africa, 4019
Tel: 031 514 5600

Batch No.

Date of Manufacture.....

Expiry date (< 2 years)....

.....Lot Nr.

Datum van Vervaardiging

...(<2 jr)...Verval datum

U.N. No. / VN Nr: 3077

Emergency number

: Griffon Poison Information Centre: 082 4468946,
Poisons Information Helpline: 0861 555 777,
In case of Spillage: Spill Tech: 086 100 0366 / 083 253 6618

WARNINGS:

H316 - Causes mild skin irritation.
H318 - Causes serious eye damage.
H412 - Harmful to aquatic life with long lasting effects.

Pre-Harvest Interval (PHI)

Allow the following number of days between the last application and harvest or feeding:

Maize grazing	28 days
Green mealies	42 days

- Poisonous if swallowed.
- Avoid contact with skin or eyes since product is eye irritant and may cause skin irritation.
- Store away from food and feeds, fertilizers and other chemicals.
- Keep out of reach of children, uninformed persons and animals.
- Do not spray over or allow drift to contaminate water or adjacent areas.

Aerial application: Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings.

Re-entry: Do not enter treated area until spray deposit has dried unless wearing protective clothing.

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:

P101 – If medical advice is needed, have product container or label at hand.
P102 – Keep out of reach of children.
P103 – Read carefully and follow all instructions.
P264+P265 - Wash hands thoroughly after handling. Do not touch eyes.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment if this is not the intended use.
P305 + P354 + P338 - IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P317 - Get medical help.
P332 + P317 - If skin irritation occurs: Get medical help.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

- Prevent contamination of food, feeds, drinking water and eating utensils.
- Wash yourself after use or accidental skin contact.
- Change and wash contaminated clothes.
- Do not inhale the spray mist.
- Avoid contact with the spray as much as you can.
- Avoid spray drift onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean applicator thoroughly after use and dispose of wash water where it will not contaminate crops, grazing, rivers or dams.

- Destroy empty container and do not use for any other purpose.

RELEVANT SUBSTANCES:

Sodium Carbonate	20 – 25%
Aqueous surfactant solution	2.5 – 10%
Ammonium Sulphate	1 - 2.5%

FIRST AID:

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Wash with plenty of water/.... Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER/doctor if you feel unwell.

RESISTANCE WARNING:

KALACH 700 WSG is a group code **9** herbicide (glycine). Any weed population may contain individual weeds naturally resistant to **KALACH 700 WSG** and other group code **9** herbicides. Resistance of *L. rigidum*, *C. bonariensis* and *Plantago lanceolata* to the chemical family of glycine has been observed in South Africa. If a glycine treatment has been ineffective in the control of the above-mentioned weeds, do not re-treat with a herbicide from the same chemical group. Resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. Resistant weeds may not be controlled by **KALACH 700 WSG** or any other group code **9** 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.

For more information on resistance management, contact the registration holder.

USE RESTRICTIONS:

When using **KALACH 700 WSG** 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.

DIRECTIONS FOR USE: Use only as indicated.

1. Use only clean water in spray mixture.
2. Always ensure that spray equipment is clean, and correctly calibrated before spraying.
3. Use low spray pressure (100 - 200 kPa) to avoid spray drift.
4. **KALACH 700 WSG** 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 UNDESIRABLE PLANTS ARE TREATED.** Do not spray onto pruned vines or fruit trees until wounds have sealed properly. **KALACH 700 WSG** is a non-selective systemic herbicide and is only active when applied to the green foliage and bark of plants. The visible effect

of **KALACH 700 WSG** on treated foliage usually appears at 10-14 days after treatment but may vary according to weather conditions. **KALACH 700 WSG** 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 an **KALACH 700 WSG** application ensures that weeds are actively growing, resulting in optimum efficacy. Rain or irrigation within 6 hours of application can reduce **KALACH 700 WSG** efficacy. Do not spray on weed foliage covered with a layer of dust. In these situations apply after recent rain. **KALACH 700 WSG** 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 **KALACH 700 WSG** spray.

MIXING INSTRUCTIONS

Half fill the spray tank with clean water and add the required quantity of **KALACH 700 WSG**. 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 **KALACH 700 WSG** and agitation must be continuous before and during spraying. Excessive foaming might be experienced with the use of the very highest rates or solutions of **KALACH 700 WSG**. It is recommended that a suitable antifoaming agent be added into the spray tank when excessive foaming is expected before the addition of the **KALACH 700 WSG**.

APPLICATION

Remove sediments eg, residues of WP pesticides, from spray tanks before adding **KALACH 700 WSG**. 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

KALACH 700 WSG 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.

Aerial application

Aerial application of **KALACH 700 WSG** may only be done by a registered Aerial Application Operator using a correctly calibrated, registered aircraft according to the instructions of SANS Code 0118 (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:

- Volume: A spray mixture volume of 30l 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: 40 to 60 droplets per cm² must be recovered at the target area.
- Droplet size: A droplet spectrum with a VMD of 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 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:

- reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage).
- 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

KALACH 700 WSG 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. Apply the **KALACH 700 WSG** 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 GRASSES		DOSAGE RATE		REMARKS
BOTANICAL NAME	COMMON NAME	kg/ha	% Soln	
<i>Cynodon dactylon</i>	Common couch	3,0	--	Summer rainfall region: Apply to active growth in autumn or summer. If re-growth occurs, spray with 1,0 % solution.
		4,6	--	Winter rainfall region: As above in autumn.
<i>Eragrostis curvula</i>	Weeping love grass	1,6	0,7	Apply to active growth in summer or autumn.
<i>Paspalum dilatatum</i>	Common Paspalum	3,0	1,4	Apply in summer at flower but before seed drop. If re-growth occurs, spray with 1,0 % solution.

1.1 GRASSES		DOSAGE RATE		REMARKS
BOTANICAL NAME	COMMON NAME	kg/ha	% Soln	
<i>Paspalum paspalodes</i>	Couch Paspalum	4,1 -4,6	--	Apply in summer at flowering but before seed drop. If re-growth occurs, spray with 1,4 % solution or 2,0 kg/ha. Apply the higher rate in the winter rainfall region.
<i>Panicum maximum</i>	Common buffalo grass	3,0	1,4	Apply in summer to actively growing plants in the early growth stage. If regrowth occurs, spray with 1,0 % solution.
<i>Pennisetum clandestinum</i>	Kikuyu	2,1	0,7	Apply in summer to actively growing plants. If regrowth occurs, spray with 0,7 % solution.
<i>Setaria megaphylla</i>	Bush buffalo grass	3,0	1,4	Apply to actively growing plants in autumn or summer. If regrowth occurs, spray with 1,0 % solution.
<i>Sorghum halepense</i>	Johnson grass	2,1	1,0	Apply in summer or autumn. If regrowth occurs, spray with 1,0 % solution.
<i>Sorghum verticilliflorum</i>	Common wild-Sorghum	1,0	0,7	Apply to actively growing plants in summer or autumn.

1.2 SEDGES		DOSAGE RATE		REMARKS
BOTANICAL NAME	COMMON NAME	kg/ha	% Soln	
<i>Cyperus esculentus</i>	Yellow nutsedge	3,0	--	Apply in summer at pre-flowering stage. If regrowth occurs, spray with 1,0 % solution or 1,4 kg/ha. (Best results in Feb/March).
<i>Cyperus rotundus</i>	Purple nutsedge	3,0	--	

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.

KALACH 700 WSG kg/ha		
0,5 – 1,0	1,0	1,6
1 – 12 leaf	12 leaf to pre-bloom	Flowering
<i>Alternanthera pungens</i>	Khaki bur weed	
<i>Amaranthus hybridus</i>	Cape pigweed	
<i>Amaranthus spinosus</i>	Thorny pigweed	
<i>Amaranthus thunbergii</i>	Red pigweed	
<i>Arctotis venusta</i>	Free State daisy	
<i>Argemone subfusiformis</i>	Mexican poppy	
<i>Bidens pilosa</i>	Blackjack	
<i>Chenopodium album</i>	White goosefoot	
<i>Chenopodium ambrosioides</i>	American goosefoot	

KALACH 700 WSG kg/ha		
0,5 – 1,0	1,0	1,6
1 – 12 leaf	12 leaf to pre-bloom	Flowering
<i>Chenopodium carinatum</i>	Green goosefoot	
<i>Chenopodium murale</i>	Nettle-leaved goosefoot	
<i>Cirsium arvense</i>	Canada thistle	
<i>Citrullus lanatus</i>	Bitter apple	
<i>Conyza albida</i>	Tall fleabane	
<i>Cucumis</i> spp	Wild cucumber	
<i>Datura ferox</i>	Large thorn apple	
<i>Datura stramonium</i>	Thorn apple	
<i>Galinsoga parviflora</i>	Gallant soldier	
<i>Gisekia pharnaceoides</i>	Gisekia	
<i>Gnaphalium subfalcatum</i>	Cudweed	
<i>Lepidium africanum</i>	Pepper cress	
<i>Pentzia grandiflora</i>	Stinkweed	
<i>Physalis angulata</i>	Wild gooseberry	
<i>Pseudognaphalium luteo-album</i>	Jersey cudweed	
<i>Richardia brasiliensis</i>	Tropical Richardia	
<i>Spergula arvensis</i>	Corn spurry	

2.2. Grasses

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

KALACH 700 WSG kg/ha		
0,7 – 1,0		1,6
1 leaf to pre-bloom		Flowering
<i>Avena fatua</i>	Common wild oats	
<i>Avena</i> spp	Wild oats	
<i>Briza maxima</i>	Quaking grass	
<i>Bromus diandrus</i>	Ripgut brome	
<i>Ehrharta longifolia</i>	Oat-seed grass	
<i>Eleusine indica</i>	Goose grass	
<i>Eragrostis curvula</i>	Weeping love grass	
<i>Hordeum murinum</i>	Wild barley	
<i>Lolium multiflorum</i>	Italian rye grass	
<i>Lolium temulentum</i>	Darnel	
<i>Panicum schinzii</i>	Sweet buffalo grass	
<i>Poa annua</i>	Winter grass	
<i>Rhynchospora repens</i>	Natal red-top	
<i>Secale cereale</i>	Rye	
<i>Sorghum bicolor</i>	Wild grain-Sorghum	
<i>Tragus racemosus</i>	Large carrot-seed grass	

2.3 Broadleaf weeds and grasses

KALACH 700 WSG kg/ha		
0,7 – 1,0	1,0 – 1,6	1,6 – 2,1
1- 12 leaf	12 leaf to pre-bloom	Flowering
<i>Arctotheca calendula</i>	Cape marigold	
<i>Chamaesyce hirta</i>	Red milkweed	
<i>Chamaesyce inaequilatera</i>	Smooth creeping milkweed	
<i>Chloris virgata</i>	Feathertop Chloris	
<i>Commelina benghalensis</i>	Wandering Jew	
<i>Conyza canadensis</i>	Canadian fleabane	
<i>Conyza albida</i>	Tall fleabane	
<i>Coronopus didymus</i>	Swine cress	
<i>Crotalaria sphaerocarpa</i>	Mealie Crotalaria	
<i>Emex australis</i>	Spiny emex	
<i>Fumaria muralis</i>	Fumitory	
<i>Hibiscus cannabinus</i>	Kenaf	
<i>Hibiscus trionum</i>	Bladderweed	
<i>Ipomoea purpurea</i>	Common morning glory	
<i>Paspalum urvillei</i> (seedlings)	Tall Paspalum	
<i>Phalaris minor</i>	Little seeded canary grass	
<i>Portulaca oleracea</i>	Common purslane	
<i>Raphanus raphanistrum</i>	Wild radish	
<i>Schkuhria pinnata</i>	Dwarf marigold	
<i>Senecio burchellii</i>	Molteno-disease Senecio	
<i>Sesamum triphyllum</i>	Wild sesame	
<i>Setaria pallide-fusca</i>	Red bristle grass	
<i>Setaria verticillata</i>	Sticky bristle grass	
<i>Sonchus oleraceus</i>	Common sowthistle	
<i>Tagetes minuta</i>	Tall khaki weed	
<i>Tribulus terrestris</i>	Common dubbeltjie	
<i>Veronica spp.</i>	Speedwell	
<i>Zea mays</i>	Volunteer maize	
<i>Triticum spp</i>	Volunteer wheat	

2.4 Broadleaf weeds and grasses

KALACH 700 WSG kg/ha		
1,3 – 1,6	1,6 – 2,6	2,6 – 3,0
1 – 12 leaf	12 leaf to pre-bloom	Flowering
<i>Cleome gynandra</i>	Spider-wisp	
<i>Digitaria sanguinalis</i>	Crab finger-grass	
<i>Echinochloa crus-galli</i>	Barnyard grass	
<i>Echium lycopsis</i>	Patterson's curse	
<i>Hypochoeris radicata</i>	Hairy wild lettuce	
<i>Panicum maximum</i>	Common buffalo grass	
<i>Paspalum urvillei</i>	Tall Paspalum	
<i>Plantago lanceolata</i>	Narrow-leaved ribwort	
<i>Polygonum aviculare</i>	Prostate knotweed	
<i>Sida cordifolia</i>	Heartleaf Sida	
<i>Solanum nigrum</i>	Nightshade	
<i>Urochloa panicoides</i>	Garden Urochloa	
<i>Verbena officinalis</i>	European Verbena	

2.5 Broadleaf weeds

KALACH 700 WSG kg/ha		
0,7 – 3,0	3,0	3,0
1 – 12 leaf	12 leaf to pre-bloom	Flowering
<i>Erodium moschatum</i>	Musk heron's bill	

2.6 Broadleaf weeds

KALACH 700 WSG kg/ha		
3,0	3,0	3,0
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

KALACH 700 WSG kg/ha		
2,6 – 3,0	2,6 – 3,0	2,6 – 3,0
1 – 12 leaf	12 leaf to pre-bloom	Flowering
<i>Rumex angiocarpus</i>	Sheep sorrel	

NOTES

For *Malva parviflora* [small mallow] and *Oenothera stricta* [evening primrose] (smaller than 12 leaf stage) control, spray **KALACH 700 WSG** at 1,6 kg/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 1,0 kg/ha **KALACH 700 WSG** prior to budburst. Regrowth must be sprayed 4 to 6 weeks later with paraquat SL plus simazine SC. Refer to paraquat SL and simazine SC labels for rates and details.

3 SPECIFIC RECOMMENDATIONS

CROP	REMARKS
3.1 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.	<ol style="list-style-type: none"> 1. See weed tables for dosage rates of KALACH 700 WSG. 2. Protect young trees with green bark from direct spray.
3.2 Vines and fruit trees.	<p>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.</p> <p>CROP COVER DESTRUCTION IN GRAPEVINES: Apply KALACH 700 WSG at 0,7 – 1,6 kg/ha. Apply 10 days or more after pruning and before bud burst.</p>
3.3 Sisal	Applications can be made to nursery and mature plants.
3.4 Arable land	Use KALACH 700 WSG 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.

3.5 SUGARCANE LAST RATOON ERADICATION

CROP	DOSAGE	REMARKS
Minimum tillage.	4,1 – 5,1 kg/ha	Allow regrowth after final harvest to grow up to 45 cm – 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.	2,0 – 4,1 kg/ha.	Use the higher rate on fertile soils where regrowth might be a problem. Spray the KALACH 700 WSG 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.	5,0 % solution	This treatment will also control certain grasses and broadleaf weeds. Apply spray solution directly on cane stools.
Pre-plant land preparation.	0,5 – 1,5 kg/ha	Annual weeds: Apply to active growing annual weeds. Perrenial weeds: Refer to tables under part 1 for details.
Spot spraying around sugarcane field.	1,0 % solution.	Direct sprays to active growing plants around field in problem areas to be cleaned.

4. MAIZE VARIETIES CONTAINING THE GLYPHOSATE RESISTANT GENE

The use of **KALACH 700 WSG** 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 KALACH 700 WSG 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 % **KALACH 700 WSG**. 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 (eg flat fan or twin jet nozzles) to deliver the required water volume and dosage rate per hectare.

Application information

CROP	APPLICATION	REMARKS
Maize	<p>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.</p> <p>Directed application. Apply after the V8 stage where row spacing permits the passage of the application equipment without causing mechanical damage to the crop.</p>	<p>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.</p> <p>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.</p>

Dosage rates

WEEDS	DOSAGE	REMARKS
Annual grasses and broadleaf weeds	1,0 kg/ha	Apply before weeds are 100 mm high.
Annual grasses and broadleaf weeds	1,3 kg/ha	Apply when weeds are between 100 and 200 mm high.
<i>Commelina benghalensis</i> (wandering jew)	1,3 kg/ha	Apply at the three leaf stage followed by a second application of 1,3 kg/ha 10–20 days later.
<i>Ipomoea purpurea</i> (morning glory)	1,3 kg/ha	Apply at the three to five leaf stage followed by a second application of 1,3 kg/ha 10–20 days later.
<i>Portulaca oleracea</i> (common purslane)	1,3 kg/ha	Apply before flowering.
<i>Cyperus esculentis</i> (yellow nutsedge)	1,3 kg/ha	Apply before plants are 100 mm high.
<i>Cyperus esculentis</i> (yellow nutsedge)	1,3 kg/ha	Apply at the three to four leaf stage followed by a second application of 1,3 kg/ha 10–20 days later.

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 varieties with the glyphosate resistant gene, followed by **KALACH 700 WSG** applications, the recommendations on the labels of these products must be followed.

In maize varieties with the glyphosate resistant gene **KALACH 700 WSG** may also be tank mixed with DIAMANT 700 S (L7050) or ALACHLOR 384 (L6667) for pre-emergent applications or with SAFFIER 750 (L7049) or ALACHLOR 384 (L6667) for post-emergence overall (before V8 stage) and directed (after V8 stage) applications. Follow the label recommendations of these herbicides. **Do not mix KALACH 700 WSG and atrazine containing herbicides.**

ACKNOWLEDGEMENT

DIAMANT 700 S – [Reg. Nr. L7050, Act 36 of 1947] – UPL South Africa (Pty) Ltd
 SAFFIER 750 – [Reg. Nr. L7049, Act 36 of 1947] – UPL South Africa (Pty) Ltd
 ALACHLOR 384 – [Reg. Nr. L6667, Act 36 of 1947] – UPL South Africa (Pty) Ltd