



CLINCHER® S

Reg. no. L10749 Act/Wet 36 of/van 1947
N-AR 2135

An emulsifiable concentrate herbicide for pre-emergence control of annual grasses and under certain conditions yellow nut sedge in maize, grain sorghum, forage sorghum, green beans, dry beans, kidney beans, groundnuts, sugarcane, sunflowers, soybeans, lupines, cotton, *Eucalyptus* and pine plantations as well as potatoes and tobacco in the summer rainfall region.

'n Emulgeerbare konsentraat onkruiddoder vir vooropkombeheer van eenjarige grasse en onder sekere omstandighede ook geeluintjies in mielies, graansorghum, voersorghum, groenbone, droëbone, nierbone, grondbone, suikerriet, sonneblomme, sojabone, lupiene, katoen, *Eucalyptus* en denne plantasies asook aartappels en tabak in die somerreënvalstreek.

HRAC HERBICIDE GROUP CODE

15

HRAC ONKRUIDDODERGROEPKODE

ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL

S-metolachlor (chloroacetamides) 960 g/L S-metolachlor (chloorasetamied)

NET VOLUME/NETTO VOLUME

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REGISTRATION HOLDER/REGISTRASIEHOUER

ADAMA South Africa (Pty.) Ltd.

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CLINCHER® is the registered trademark of a company of the ADAMA GROUP.
CLINCHER® is die geregistreerde handelsmerk van 'n maatskappy van die ADAMA GROEP.

CONTACT IN EMERGENCY/KONTAK IN NOOD

Grieffon Poison Information Centre: +27 82 446 8946

Tygerberg Poison Information Centre: +27 861 555 777

Batch number
Date of manufacture

Lotnommer
Datum van vervaardiging

UN no.:3082


HARMFUL
SKADELIK



WARNINGS

- Handle with care.
- Poisonous if swallowed.
- Toxic to fish.
- Store in a cool place.
- Store away from food and feed.
- Keep out of reach of children, uninformed persons and animals.
- **In case of poisoning call a doctor and make this label available to him.**
- **Re-entry:** Do not enter treated area within 1 day after application 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.

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be effective under all conditions. The activity and effect 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, 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 by 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

- Do not inhale the spray mist.
- Avoid skin contact.
- Wash with soap and water after use.
- Wash contaminated clothing after use.
- Do not eat, drink or smoke while mixing or applying the product or before washing hands and face.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean applicator after use. Dispose of rinsate where it will not contaminate crops, grazing, rivers, dams and boreholes.
- Prevent contamination of food, feed, drinking water and eating utensils.
- Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container three times in succession with one quarter of the container volume fresh water and decant the

rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler (www.croplife.co.za).

- Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.

SYMPTOMS OF HUMAN POISONING

No case of human poisoning is on record.

FIRST AID TREATMENT

If poisoning is suspected immediately call a physician. Remove patient from further contact with pesticide and place him/her in a well-ventilated area.

In case of eye contact hold eyelids open and flush with a steady, gentle stream of water for 15 minutes.

In case of skin contact, wash with plenty of soap and water. Consult a physician if irritation persists.

If the substance has been swallowed promptly administer a large quantity of milk, egg whites, gelatine solution or, if these are not available large quantities of water. Do not induce vomiting or give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN

No specific antidote is known. If ingested, induce emesis or lavage stomach. Administration of an aqueous slurry of activated charcoal may be considered. Apply symptomatic therapy.

RESISTANCE MANAGEMENT

CLINCHER® S is a group code 15 herbicide. Any weed population may contain individuals naturally resistant to **CLINCHER® S** and other group code 15 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly and exclusively in programs. These resistant weeds may not be controlled by **CLINCHER® S** or any other group code 15 herbicides.

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 programs.

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

USE RESTRICTIONS

NB. DO NOT APPLY CLINCHER® S AS A PRE-EMERGENCE TREATMENT ON MAIZE.

CLINCHER® S on green beans is only registered for use by McCains on the cultivars Fortè, Masai and Dark Seeded Provider in the production area of the Loskop scheme, Letsitele, Ohrigstad and certain areas of the Highveld.

CLINCHER® S may damage certain crops under the following conditions:

- Inbred parent plants of maize hybrids. First consult a representative of ADAMA South Africa (Pty.) Ltd., the distributor or seed supplier.
- Tobacco and forage sorghum planted on very sandy and/or gravelly soils or where flood irrigation is practised.
- Grain sorghum and forage sorghum on soils with a high percentage (more than 60 %) fine sand and/or poor structure which are inclined to compact with rain and which are therefore poorly aerated, or grain sorghum and forage sorghum planted deeper than 50 mm.
- Grain sorghum, forage sorghum and dry beans on fields with a high incidence of soil borne diseases and/or where monoculture is practised.
- Dry beans in hot, dry conditions especially in the presence of a compaction layer in the soil. Under these conditions beans might also be susceptible to wind damage.
- Sunflowers and dry beans on waterlogged, shallow, sandy soils of <100 cm depth with an impermeable clay sub soil.

CLINCHER® S can only be used on forage sorghum which are sorghum x sorghum hybrids and sorghum x Sudan grass hybrids. Hybrids with *Pennisetum* spp and hybrids containing the BMR genes should not be sprayed with **CLINCHER® S**.

CONCEP® 960 EC seed treatment should only be used in combination with **CLINCHER® S** or DUAL GOLD and CLINCHER® S GOLD.

Important

Where other herbicides are used in combination with **CLINCHER® S** the restrictions of use as given on the labels of the herbicides concerned, must be adhered to.

Warning: Possible damage to triazine sensitive crops

- Where soils have been treated with lime to correct the soil pH, the possibility of crop damage increases dramatically in fields where triazines were previously applied. This is due to the triazine molecules being replaced on the clay complex with calcium cations and the triazine thus becoming more available in the soil-water complex.
- Only maize should be planted in the season directly after soil pH adjustment with lime.
- No triazine sensitive crops should be planted in the season after the soil pH adjustment has been done with lime. This applies even if triazines were used at crop rotation rates in previous years.
- Triazine sensitive crops include all broadleaf crops e.g. different bean crops, sunflowers and all cereals e.g. wheat.
- These warnings however do not guarantee that no damage would be experienced to even the following maize crop as large volumes of previously applied triazines might now be available depending on the volume of lime applied and the rainfall experienced.

Warning: Possible increased efficacy, phytotoxicity and residual action

- Increasing the soil pH levels above 7 could produce conditions for increased efficacy and reduced selectivity. This increased pH may also result in increased soil residual action by certain herbicides influencing the choice of following crops especially under irrigation.

- In situations where pH adjustments have been done, take care when sulphonyl urea herbicides, triazolopyrimidine sulfonanilide herbicides and imidazolinone herbicides, which are all sensitive to soil pH fluctuations, have been used or are about to be used.

Contact your local ADAMA South Africa (Pty.) Ltd. representative to discuss crop rotation and crop protection programmes to follow before embarking on any pH adjustment programme.

WEEDS CONTROLLED

The following weed species are normally controlled by a pre-emergence application of CLINCHER® S at the dosage rates as indicated below:

Botanical name	Common name
<i>Brachiaria eruciformis</i>	Sweet signal-grass
<i>Chloris virgata</i>	Feathertop Chloris
<i>Dactyloctenium aegyptium</i>	Crowfoot
<i>Digitaria sanguinalis</i>	Crab finger-grass
<i>Echinochloa crus-galli</i>	Barnyard grass
<i>Eleusine indica</i>	Goose grass
<i>Panicum maximum</i>	Common buffalo grass
<i>Panicum schinzii</i>	Sweet buffalo grass
<i>Pseudobrachiaria deflexa</i>	False signal grass
<i>Setaria pallide-fusca</i>	Red bristle grass
<i>Setaria verticillata</i>	Sticky bristle grass
<i>Tragus berteronianus</i>	Small carrotseed grass
<i>Tragus racemosus</i>	Large carrotseed grass
<i>Urochloa mosambicensis</i>	Bushveld herringbone grass
<i>Urochloa panicoides</i>	Herringbone grass

Control of the following weeds is variable

Botanical name	Common name
<i>Amaranthus hybridus</i>	Common pigweed
<i>Amaranthus spinosus</i>	Thorny pigweed
<i>Amaranthus thunbergii</i>	Red pigweed
<i>Chenopodium carinatum</i>	Green goosefoot

Botanical name	Common name
<i>Cleome monophylla</i>	Spindlepod
<i>Commelina benghalensis</i>	Bengal wandering Jew
<i>Cyperus esculentus</i>	Yellow nutsedge
<i>Datura ferox</i>	Large thorn apple
<i>Datura stramonium</i>	Thorn apple
<i>Galinsoga parviflora</i>	Gallant Soldier
<i>Nicandra physaloides</i>	Apple of Peru
<i>Portulaca oleracea</i>	Purslane

Important

Yellow nutsedge (*Cyperus esculentus*)

The control of *C. esculentus* can be improved provided the following conditions are met:

- Planting is immediately preceded by thorough ploughing with a mouldboard plough.
- A relatively fine, even and firm seedbed is prepared.
- Herbicide application is followed by at least 10 - 20 mm of soft penetrating rain (or irrigation) to leach the herbicide into the soil prior to the emergence of *C. esculentus* (normally 7 - 10 days after ploughing). These conditions are more likely to occur during the latter half of the planting season (November). More rain or irrigation is required on heavier soils to obtain good results. This is the reason for the poor control sometimes obtained on turf soils.
- Rainfall following herbicide application but before emergence of *C. esculentus* is necessary for optimum *C. esculentus* control. For this reason application of **CLINCHER® S** should be made at or immediately after planting onto moist soil.
- When planting into dry soil (insufficient moisture for *C. esculentus* germination) the application of **CLINCHER® S** should be timed as close as possible to, but definitely before the first rains.

Grass control

Grass killers belonging to the chloroacetamide group of herbicides (that includes **CLINCHER® S**) are absorbed via the coleoptiles of grass weeds. Therefore, for good grass control the herbicide needs to be present at lethal concentrations in the top ± 50 mm of the soil profile. The adsorptive capacity of a soil for these herbicides, as well as the amount of water that moves through the soil profile with rain/irrigation, determine the resultant concentration of these herbicides in the top layers of the soil profile. As a result of the low adsorption capacity of sandy soils (0 – 15 % clay, < 1 % organic matter) the amount of these herbicides can be reduced to sub-lethal concentrations in the top ± 50 mm after the occurrence of permeating rain (25 mm and more within one day). Persistent rain (50 mm and more distributed over 3 – 7 days) will have the same result. It can therefore happen that grasses germinate if such

conditions prevail. Split applications are recommended if **CLINCHER® S** is used on such soils. Permeating and / or persistent rain after the split application will have the same result.

DIRECTIONS FOR USE

Use only as directed.

COMPATIBILITY

The compatibility of **CLINCHER® S** with other products may be influenced by the formulation of the products involved as well as the quality of the water. Since the formulation of other products may change without the knowledge of ADAMA South Africa (Pty.) Ltd. and the quality of water may vary from farm to farm, a physical compatibility test should always be carried out prior to application.

CLINCHER® S is compatible with CALLISTO (L6795), AGRAL 90 (L2967), BREAKTHRU (L5895), COMPLEMENT SUPER (L8169), TRONIC (L3685), SOLITAIRE (L6962), GARDOMIL® GOLD 600 SC (L6246), GESAPRIM SUPER (L3914), SORGOMIL® GOLD 600 SC (L5897), GESAPRIM 90 WG (L4767), HAMMER® 100 SL (L5201), IGRAN® 500 SC (L0324), SENCOR® 480 SC (L3034), GRAMOXONE® (L1174), ADAMA PARAQUAT (L10792), STING® (L3066), MCPA, and 2, 4-D amine as recommended on this label.

MIXING INSTRUCTIONS

Replace cap after use

Half-fill the spray tank with water, then pour the required amount of **CLINCHER® S** into the spray tank while the water is being stirred. Top up with water to the final volume required.

When **CLINCHER® S** is tank mixed with SORGOMIL GOLD 600 SC or GESAPRIM SUPER or IGRAN 500 SC or SENCOR 480 SC or GESAPAX 500 SC or DIURON 800 SC or 2,4-D Amine or MCPA or HAMMER 100 SL, these compounds should be added to the water first. **CLINCHER® S** should then be added last, just before the required volume is reached. When GRAMOXONE, ADAMA PARAQUAT or STING is included in a tank mixture it should be added last, only after all the other products have been added and properly mixed just prior to the final volume being obtained.

Ensure thorough agitation of the mixture in the tank during mixing and spraying.

Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank.

APPLICATION TECHNIQUES

Post plant pre-emergence

When planting into moist soil, **CLINCHER® S** must be applied within three days of planting (but preferably at planting) on a fine, even, firm and freshly prepared weed-free seedbed. To obtain good results it is necessary that application is followed by rain or irrigation before the weeds emerge. If rainfall does not occur in time and weeds begin to emerge and develop, a shallow cultivation must be carried out to destroy these weeds and to mix the herbicide with the top 10 - 20 mm of soil.

When planting into dry soil (insufficient moisture for germination), **CLINCHER® S** must be applied as close to, but definitely before the first rain. Emerged weeds at the time of application will not be controlled.

Post-emergence (maize and potatoes)

CLINCHER® S has very limited post-emergence effect. It may, however, be applied post-emergence to the crop immediately after a cultivation i.e. when no weeds are present. Weeds that are present after the cultivation will not be controlled.

Ground application

CLINCHER® S may be applied with any medium or high-volume sprayer properly calibrated and which is equipped with an efficient agitation mechanism. Choice and arrangement of fan-type spray nozzles should be such as to ensure even distribution and optimal recovery of the herbicide. The recommended amount of **CLINCHER® S** should be applied in at least 200 ℥ water/ha.

Aerial application (Pre- and post-emergence)

Aerial application of this product may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of SANS 10118 (Aerial Application of Agricultural Remedies). It is important to 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 are met:

a) Application parameters:

- **Volume:** A volume of 30 L/ha (pre-emergence) and 35 L/ha (post emergence) 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 the product is applied aerially at a lower volume rate than recommended above.
- **Droplet coverage:** A droplet coverage of 20 - 30 droplets/cm² (pre-emergence) and 30 – 45 droplets/cm² (post emergence) must be recovered at the target.
- **Droplet size:** A droplet spectrum with a VMD of 350 - 400 microns (pre-emergence) and 300 – 350 (post emergence) is recommended. Ensure that the production of fine droplets (less than 150 microns - high drift & evaporation potential) is restricted to a minimum.
- **Flying height:** The height of the spray boom should be maintained at 3 - 4 metres above the target. Do not spray when aircraft is in a climb, at the top or during a dive, or when banking.

b) Equipment:

- Use suitable atomising equipment (hydraulic nozzles or rotary atomisers) that will produce the desired droplet size and coverage but which will ensure the minimum loss of product either through endodrift (within target field) or exodrift (outside target field). The operator must use a setup that will produce a droplet spectrum with the lowest possible relative span.
- All nozzles / atomisers should be positioned within the inner 60% to 75% of the wingspan to prevent droplets from entering the wingtip vortices.

c) Meteorological conditions:

- The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8°C. The addition of a suitable anti-evaporant is recommended if the VMD of the droplets is less than 200 - 250 microns.
- Stop spraying if the wind speed exceeds 15 km/h or reduces to less than 5 km/h.
- Aerial application of this product must not be done under turbulent, unstable conditions during the heat of the day when rising thermals and downdraughts occur. Also note that the application of this product under temperature inversion conditions (spraying in or above the inversion layer) 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 the movement of the suspended spray cloud away from the target field.

CLINCHER® S and **CLINCHER® S** plus GESAPAX 500 SC may be applied aerially provided that the spray mixture is distributed evenly over the target area and the loss of spray material during application is restricted to a minimum.

It is essential to obtain an assurance from the aerial spray operator that the above requirements are met.

Centre pivot irrigation application

CLINCHER® S may be applied in irrigation water pre-emergence (after planting but before weeds or crop emerge) at rates recommended on this label. Use only centre pivot systems that apply water uniformly. Prepare a mixture with a minimum of one part of water to one part herbicide and inject this mixture into the centre pivot system using a positive displacement pump. Injecting a larger volume of a more dilute mixture per hour will usually provide more accurate calibration of metering equipment. Maintain sufficient agitation to keep the herbicide in suspension. Apply in 12,5 - 25 mm of water. Use the lower water volume (12,5 mm) on coarser textured soils and the higher volume (25 mm) on finer textured soils. More than 25 mm of water at application may reduce weed control by moving the herbicide below the effective zone in the soil.

Precautions for centre pivot applications:

- Apply only through irrigation systems containing anti-siphon and check valves to prevent contamination of the well during shutdown and overflow of solution tank.
- Inject ahead of any right angle turn in the main line to insure adequate mixing.
- Chemical injection pumps and water pumps must have interlocking controls to insure simultaneous shut-off.
- Application when drift may occur, such as from windy conditions, or when systems joints and connections are leaking, or when nozzles are not providing uniform distribution, may cause crop injury.
- Where sprinkler distribution patterns do not overlap sufficiently, unacceptable weed control may result. Where sprinkler distribution patterns overlap excessively, crop injury or unacceptable residues may result.

APPLICATION RATES

A. GREEN BEANS, GROUNDNUTS, DRY BEANS, KIDNEY BEANS, SUNFLOWERS, COTTON, SOYBEANS AND LUPINS

TABLE 1: The following application rates of CLINCHER® S are recommended for the different crops on various soil types and for the control of certain weeds:

Soiltype	% Clay	CLINCHER® S (L/ha)
Sand/Loamy sand/sandy loam	0 – 20	0.6 – 0.8
Sandy clay loam	21 – 30	0.8 – 1.0
Sandy clay loam/Sandy clay	> 30	1.0 – 1.3

Use the higher application rate of CLINCHER® S for improved control of **yellow nutsedge** (*C. esculentus*) or where heavy infestations of **crab finger grass** (*D. sanguinalis*) exist or where the organic matter in the soil exceeds 1 %.

CLINCHER® S can be used pre-emergence on glyphosate tolerant cotton and soybeans in combination with TOUCHDOWN Forte HITECH applied post-emergence.

Important (groundnuts only)

- To obtain good broadleaf control, IGRAN 500 SC may be added to CLINCHER® S at the rates indicated on the IGRAN 500 SC label per soil type. IGRAN 500 SC is only recommended where overhead sprinkler irrigation is practised.

Tank mixtures with HAMMER 100 SL

The following application rates as tank mixtures of CLINCHER® S plus HAMMER 100 SL are recommended for the different crops on various soil types and for the control of certain weeds.

TABLE 2: Tank mixtures of CLINCHER® S plus HAMMER 100 SL on dry beans:

Soil type	% Clay	CLINCHER® S (L/ha)	HAMMER 100 SL (L/ha)
Sand/loamy sand	0 – 15	0.6	0.3
Sandy loam/sandy clay loam	16 – 25	0.6	0.4
Sandy clay loam/sandy clay	26 – 35	0.8	0.5
Sandy clay/Turf	> 35	NOT RECOMMENDED	

TABLE 3: Tank mixtures of CLINCHER® S plus HAMMER 100 SL in groundnuts and soybeans:

Soil type	% Clay	CLINCHER® S (L/ha)	HAMMER 100 SL (L/ha)
Sand/loamy sand/sandy loam	0 – 25	0.5 – 0.8	0.4

Soil type	% Clay	CLINCHER® S (L/ha)	HAMMER 100 SL (L/ha)
Sandy clay loam/sandy clay	26 – 35	0.8 – 1.0	0.5
Sandy clay/Turf	> 35	NOT RECOMMENDED	

Remarks Tables 2 and 3

- A tank mixture of **CLINCHER® S** plus HAMMER 100 SL may damage the crop when used on a soil with a pH (H_2O) of more than 7.
- The control of certain weeds may be detrimentally affected under the following conditions:
 - a) A poorly prepared seedbed.
 - b) Soils with a pH (H_2O) of less than 5.
 - c) Dry conditions directly after application or a lack of sufficient rain on heavy soils.
- The application rate of **CLINCHER® S** must be increased in TABLE 3 in accordance with the increase in clay content within each soil type group.
- See the HAMMER 100 SL label for full details.

Tank mixtures with Sencor 480 SC (soybeans)

The following application rates as tank mixtures of **CLINCHER® S** plus SENCOR 480 SC are recommended on soybeans on various soil types and for the control of certain weeds as indicated on the SENCOR 480 SC label, additional to that controlled by **CLINCHER® S**.

TABLE 4: Tank mixtures of **CLINCHER® S** with SENCOR 480 SC on soybeans:

Soil type	% Clay	CLINCHER® S (L/ha)	SENCOR 480 SC (L/ha)
Sand	0 – 10	NOT RECOMMENDED	
Loamy sand/sandy loam	11 – 20	0.6 – 0.8	0.54
Sand clay loam	21 – 35	0.8 – 1.0	0.70
Sandy clay loam/Sandy clay/turf	>35	NOT RECOMMENDED	

Remarks Table 4

- Use the higher application rate of **CLINCHER® S** to improve the control of **yellow nutsedge** (*C. esculentus*) or where heavy infestations of **crab finger grass** (*D. sanguinalis*) exist.
- Use the **CLINCHER® S** plus SENCOR 480 SC mixture only on soils with more than 1 % organic matter.
- See SENCOR 480 SC label for cultivar restrictions.

- Do not apply **CLINCHER® S** plus SENCOR 480 SC on soybeans which are planted on soils with exceptionally low or high pH values (pH (H₂O) lower than 4,5 and higher than 7), or on soils with mineral deficiencies, or on waterlogged soils, as injury might occur.
- The application of **CLINCHER® S** plus SENCOR 480 SC on light soils early in the season under conditions of low night temperatures may cause injury.
- Over-application, application at the incorrect growth stage, or any other use not in accordance with the directions on the **CLINCHER® S** and SENCOR 480 SC labels, may cause stunting of the crop and other adverse effects.
- Consult the SENCOR 480 SC label for full details.

B. POTATOES (summer rainfall region only)

Apply 1.2 L/ha **CLINCHER® S** on all soil types. To obtain good broadleaf weed control SENCOR 480 SC may be added to **CLINCHER® S** at a rate of 1.1 L/ha. When used in combination with SENCOR 480 SC, the rate of **CLINCHER® S** may be lowered to 1 L/ha where potatoes are planted during the rainy season or under irrigation. Where potatoes are planted on dry land, prior to the start of the rainy season, the high rate of **CLINCHER® S** should be applied even when used in combination with SENCOR 480 SC.

The restrictions with regard to SENCOR 480 SC as indicated on the label must be observed.

Ridging

After herbicide application, ridging should be delayed as long as possible since untreated soil is brought to the surface by this operation, which may result in a new flush of weed growth.

CLINCHER® S can also be applied post-emergence to the potatoes after ridging. Under these circumstances a directed application is preferable although not essential.

C. GRAIN SORGHUM / FORAGE SORGHUM

CLINCHER® S can be used in grain sorghum and forage sorghum provided the sorghum seed has been properly treated as prescribed with CONCEP® 960 EC. The application rates in Table 5 are recommended for the control of annual grasses and partial control of *C. esculentus*.

CLINCHER® S can only be used on forage sorghum which are sorghum x sorghum hybrids and sorghum x Sudan grass hybrids. Hybrids with *Pennisetum* spp and hybrids containing the BMR genes should not be sprayed with **CLINCHER® S**.

CONCEP® 960 EC seed treatment should only be used in combination with **CLINCHER® S**, CLINCHER® S GOLD or DUAL GOLD.

TABLE 5: CLINCHER® S rates when applied on CONCEP 960 EC treated sorghum:

Soil type	% Clay	CLINCHER® S (L/ha)
Sand/loamy sand/sandy loam	0 – 20	NOT RECOMMENDED
Sandy clay loam	21 – 30	0.8

Soil type	% Clay	CLINCHER® S (L/ha)
Sandy clay	31 – 40	0.9
Turf	> 40	0.9 – 1.3

Important

- On turf soils, *B. eruciformis* may require 1.3 L/ha of CLINCHER® S for good control. It may also improve the control of *C. esculentus*.
- Use the higher application rates of CLINCHER® S where heavy infestations of *D. sanguinalis* (**crab finger grass**) exist.
- If grain and forage sorghum seed are not properly pre-treated with CONCEP 960 EC, CLINCHER® S will cause severe injury to the crop.
- If a soil crust is formed, it should be broken up immediately by means of shallow cultivation.
- CLINCHER® S may damage grain and forage sorghum temporarily when high soil moisture conditions occur 4 – 6 weeks after planting. The crop will normally outgrow this injury without any detrimental effect on yield.

CONTROL OF BROADLEAF WEEDS (grain sorghum only)

A tank mix of CLINCHER® S plus SORGOMIL GOLD 600 SC at 0.5 L/ha + 3 L/ha may be used for pre-emergence weed control in grain sorghum on soils with 21 – 30 % clay and 0.6 L/ha + 3.7 L/ha on soils with 31 – 35 % clay. (Consult the SORGOMIL GOLD 600 SC label.)

On all soil types a pre-emergence treatment of CLINCHER® S for grass control may be followed by an early post-emergence treatment of GESAPRIM SUPER or GESAPRIM SUPER plus 2,4-D amine to control the broadleaf weeds. (Consult the GESAPRIM SUPER 600 SC label.)

An alternative after a pre-emergence treatment of CLINCHER® S is an early post-emergence follow-up treatment with SORGOMIL GOLD 600 SC. SORGOMIL GOLD 600 SC may only be applied from the 5-leaf stage of the grain sorghum.

When crop rotation is practised the SORGOMIL GOLD 600 SC rate must not exceed 2 L/ha. (Consult the SORGOMIL GOLD 600 SC label.)

TABLE 6: Application rates of CLINCHER® S, followed by SORGOMIL 600 SC on grain sorghum:

Soil type	% Clay	Pre-emergence CLINCHER® S (L/ha)	Post-emergence SORGOMIL GOLD 600 SC (L/ha)
Sand/loamy sand	0 – 15	NOT RECOMMENDED	
Sandy loam	16 – 20	0.5	2.6
Sandy clay loam	21 – 30	0.6	3.0
Heavier soils including turf	> 30	0.7 – 1.0	3.0

Important

- The adjuvant COMPLEMENT SUPER should be added to all post-emergence applications except GESAPRIM SUPER 600 SC plus 2,4-D amine.
- On turf soils 1 L/ha **CLINCHER® S** may be required for good control of *B. eruciformis* and it can also be used for improved control of *C. esculentus*.

D. TOBACCO (summer rainfall region only)

Apply **CLINCHER® S** as a full cover spray within 3 days after transplanting of the tobacco while the plants are still wilted. When **CLINCHER® S** is applied to turgid tobacco transplants the spray must be directed in such a way that it does not enter the funnel of the plant where it may damage the growing point. Where **CLINCHER® S** is sprayed on the leaves of actively growing tobacco scorching may occur. On light soils (0 -10 % clay) **CLINCHER® S** must only be applied between plant rows in such a way that an unsprayed strip with a width of about 20 – 25 cm on top of the ridge (i.e. 10 cm on both sides of the plant row) is left.

Existing weeds must be removed before **CLINCHER® S** is applied. This may be done mechanically, by hand, or by application of GRAMOXONE or ADAMA PARAQUAT immediately before transplanting. Any growing weeds present at the time of application will not be controlled.

Where tobacco is planted on ridges, use 110° nozzles and position the nozzles between the ridges. This will ensure more even distribution of the herbicide.

In order to activate the **CLINCHER® S**, overhead irrigation of at least 10 mm, but not more than 15 mm, should be applied within 2 – 3 days after **CLINCHER® S** application on soils with less than 35 % clay and at least 20 mm, but not more than 30 mm, on soils with more than 35 % clay.

Only strong and healthy plants should be transplanted.

Transplanted tobacco plants with roots exposed to **CLINCHER® S** at the time of application will be adversely affected. Ensure, therefore, that planting is done properly.

TABLE 7: The following CLINCHER® S application rates are recommended on tobacco:

Soil type	% Clay	CLINCHER® S (L/ha)
Sand	0 – 10	0.5
Loamy sand/sandy loam	11 – 20	0.7
Sandy clay loam	21 – 35	1.0
Sandy clay	> 35	1.4

E. EUCALYPTUS SPP. AND PINE PLANTATIONS

CLINCHER® S may be applied immediately after transplanting the young trees on a well-prepared weed-free seedbed, but before the emergence of weeds.

Should grass weeds already be present at the time of planting it is recommended that a tank mix of GRAMOXONE or ADAMA PARAQUAT and **CLINCHER® S** be applied prior to planting.

Apply GRAMOXONE at the rates as recommended by the manufacturer. The GRAMOXONE or ADAMA PARAQUAT will kill the emerged weeds and create a pre-emergence situation for **CLINCHER® S** to act effectively.

If grass weeds are present after the trees have been planted, the **CLINCHER® S** application may be followed one week later by AGIL® 100 EC (L4694), as recommended by the manufacturer, to kill the emerged grasses.

TABLE 8: The following CLINCHER® S rates are recommended in *Eucalyptus* spp. and pine plantations:

Soil type	% Clay	CLINCHER® S (L/ha)
Sand/loamy sand/sandy loam	0 – 20	1.0
Sandy clay loam	21 – 30	1.3
Sandy clay loam/sandy clay	> 30	1.6 – 2.0

Use the higher rate where the soil organic matter content exceeds 1 %.

F. MAIZE

i) Residual grass control

Residual grass control after a pre-emergence application of DUAL GOLD (L5749) or **CLINCHER® S GOLD** (L10748) may be prolonged with a post-emergence application of **CLINCHER® S**. This application must be made after a thorough cultivation, as emerged grass weeds will not be controlled.

TABLE 9: CLINCHER® S applied post-emergence on maize:

Soil type	% Clay	CLINCHER® S (L/ha)
Sand	0 – 10	0.35
Loamy sand/sandy loam	11 – 20	0.30
Sandy clay loam	21 – 30	0.35
Sandy clay loam/Sandy clay	31 – 40	0.35 – 0.50
Sandy clay/Turf	41 – 50	0.35 – 0.50

Comments

If the DUAL GOLD or **CLINCHER® S GOLD** plus **CLINCHER® S** split treatment is selected (compare Table 3 of the DUAL GOLD label and **CLINCHER® S GOLD**) on soils containing

more than 30 % clay, the rate of **CLINCHER® S** may be varied according to the degree of pre-emergence control achieved and the prevailing weather conditions.

The higher dosage rate of **CLINCHER® S** may be used if grass weeds have started to emerge at the time of the post-emergence application.

In order to control broadleaf weeds effectively GESAPRIM SUPER can be added to the above recommended rates of **CLINCHER® S**. Consult the GESAPRIM SUPER label (compare Table 1 of the GESAPRIM SUPER label). Do not apply 2,4-D Amine in tank mixture with **CLINCHER® S** on maize.

ii) Residual grass control with knockdown affect

Post-emergence application of **CLINCHER® S** plus **CALLISTO** plus **GESAPRIM SUPER** plus an adjuvant

- **CALLISTO** must be applied post emergence when the target
 - grasses are between the 2- to 3-leaf stage
 - broadleaf weeds are between the 2- to 6-leaf stage.
- **Recommended adjuvants***: In all post emergence applications of **CALLISTO** an adjuvant must be used. The following adjuvants are recommended:
 - Agral at 200 ml/100 L spray volume
 - Breakthru at 50 ml/100 L spray volume
 - Complement Super 100 ml/ha
 - Penetrex at 500 ml/100 L spray volume
 - Solitaire at 100 ml/100 L spray volume
 - Tronic at 500 ml/ha
- To enhance the activity on larger weeds 250 ml 2,4-D can be added to the tank mixtures mentioned below. The addition of 2,4-D is recommended for the control of morning glory and other problem weeds.
- This post-emergence application should be preceded by a pre-emergence application of **CALLISTO**, **DUAL GOLD**, **CLINCHER® S GOLD**, **GARDOMIL GOLD**, **GESAPRIM 90 WG** or **GESAPRIM SUPER** as indicated on the registered labels.

CALLISTO	plus CLINCHER® S	plus GESAPRIM SUPER	plus a recommended adjuvant *
104 ml/ha	135 – 508 ml/ha	416 ml/ha	
Weeks control	Botanical name	Common name	
4	<i>Amaranthus hybridus</i>	Common pigweed	

CALLISTO	plus CLINCHER® S	plus GESAPRIM SUPER	plus a recommended adjuvant *
104 ml/ha	135 – 508 ml/ha	416 ml/ha	
Weeks control	Botanical name	Common name	
4	<i>Crotalaria sphaerocarpa</i>	Mealie Crotalaria	
4	<i>Galinsoga parviflora</i>	Gallant Soldier	
4	<i>Hibiscus trionum</i>	Bladder weed	
4	<i>Tagetes minuta</i>	Khaki weed	
4	<i>Xanthium strumarium</i>	Cocklebur	

CALLISTO	plus CLINCHER® S	plus GESAPRIM SUPER	plus a recommended adjuvant *
104 ml/ha	203 – 508 ml/ha	416 ml/ha	
Weeks control	Botanical name	Common name	
The above mentioned weeds plus			
4	<i>Cleome monophyla</i>	Spindlepod	
4	<i>Datura ferox</i>	Large thorn apple	
4	<i>Datura stramonium</i>	Thorn apple	

CALLISTO	plus CLINCHER® S	plus GESAPRIM SUPER	plus a recommended adjuvant *
156 ml/ha	203 – 508 ml/ha	416 ml/ha	
Weeks control	Botanical name	Common name	
The above mentioned weeds plus			
8	<i>Bidens bipinnata</i>	Spanish blackjack	

CALLISTO	plus CLINCHER® S	plus GESAPRIM SUPER	plus a recommended adjuvant *
156 ml/ha	203 – 508 ml/ha	416 ml/ha	
Weeks control	Botanical name	Common name	
8	<i>Bidens pilosa</i>	Common blackjack	
8	<i>Datura ferox</i>	Large thorn apple	
8	<i>Galinsoga parviflora</i>	Gallant Soldier	
8	<i>Tagetes minuta</i>	Khaki weed	

CALLISTO	plus CLINCHER® S	plus GESAPRIM SUPER	plus a recommended adjuvant *
156 ml/ha	305 – 508 ml/ha	416 ml/ha	
Weeks control	Botanical name	Common name	
The above mentioned weeds plus			
4	<i>Citrullus lanatus</i>	Wild watermelon	

CALLISTO	plus CLINCHER® S	plus GESAPRIM SUPER	plus a recommended adjuvant *
208 ml/ha	271 – 508 ml/ha	416 ml/ha	
Weeks control	Botanical name	Common name	
The above mentioned weeds plus			
4	<i>Commelina benghalensis</i>	Benghal wandering Jew	
4	<i>Ipomoea purpurea</i>	Common morning glory	
4	<i>Tribulus terrestris</i>	Dubbeltjie	
8	<i>Cleome monophylla</i>	Spindlepod	

CALLISTO	plus CLINCHER® S	plus GESAPRIM SUPER	plus a recommended adjuvant *
208 ml/ha	271 – 508 ml/ha	416 ml/ha	
Weeks control	Botanical name	Common name	
8	<i>Hibiscus trionum</i>	Bladder weed	

CALLISTO	plus CLINCHER® S	plus GESAPRIM SUPER	plus a recommended adjuvant *
208 ml/ha	406 – 508 ml/ha	416 ml/ha	
Weeks control	Botanical name	Common name	
The above mentioned weeds plus			
4	<i>Digitaria sanguinalis</i>	Crab fingergrass	
4	<i>Eleusine indica</i>	Goose grass	
8	<i>Amaranthus hybridus</i>	Common pigweed	
8	<i>Commelina benghalensis</i>	Benghal wandering Jew	
8	<i>Ipomoea purpurea</i>	Common morning glory	
8	<i>Tribulus terrestris</i>	Dubbeltjie	

CALLISTO	plus CLINCHER® S	plus GESAPRIM SUPER	plus a recommended adjuvant *
260 ml/ha	339 – 508 ml/ha	416 ml/ha	
Weeks control	Botanical name	Common name	
The above mentioned weeds plus			
4	<i>Hibiscus cannabinus</i>	Kenaf	
8	<i>Citrullus lanatus</i>	Wild watermelon	
8	<i>Digitaria sanguinalis</i>	Crab fingergrass	

CALLISTO	plus CLINCHER® S	plus GESAPRIM SUPER	plus a recommended adjuvant *
260 ml/ha	339 – 508 ml/ha	416 ml/ha	
Weeks control	Botanical name	Common name	
8	<i>Eleusine indica</i>	Goose grass	

CALLISTO	plus CLINCHER® S	plus GESAPRIM SUPER	plus a recommended adjuvant *
260 ml/ha	508 ml/ha	416 ml/ha	
Weeks control	Botanical name	Common name	
The above mentioned weeds plus			
8	<i>Crotalaria sphaerocarpa</i>		Mealie Crotalaria
Up to 80% suppression of the following weeds:			
8	<i>Chloris virgata</i>	Feathertop Chloris	
8	<i>Cyperus esculentus</i>	Yellow nutsedge	
8	<i>Hibiscus cannabinus</i>	Kenaf	
8	<i>Urochloa panicoides</i>	Herringbone grass	
8	<i>Xanthium strumarium</i>	Cocklebur	

Consult the CALLISTO, GESAPRIM SUPER, BREAKTHRU, COMPLEMENT SUPER, PENETREX, SOLITAIRE, TRONIC and AGRAL 90 labels for warnings, precautions and directions for use.

iii) Post-emergence application on glyphosate tolerant maize

CLINCHER® S can be applied in tank mixes with CALLISTO and TOUCHDOWN Forte HITECH on glyphosate tolerant maize to provide knockdown and residual control.

Any individual plants that do not contain the glyphosate tolerant gene would die when sprayed with glyphosate based products e.g. TOUCHDOWN Forte HITECH. The utmost care should be taken not to apply this tank mixture to conventional (non-glyphosate tolerant) maize. Follow the label instructions for the application of this tank mixture to glyphosate tolerant maize as described on the TOUCHDOWN Forte HITECH label.

When tank mixing **CLINCHER® S** with CALLISTO and TOUCHDOWN Forte HITECH

- ammonium sulphate e.g. Velocity Glyfo must be used to correct the water quality status of the water
- no adjuvants may be used
- no other triazine may be added to this tank mixture
- the TOUCHDOWN Forte and CALLISTO labels should be followed carefully.
- **CLINCHER® S** plus CALLISTO may not be applied with any other glyphosate containing product other than TOUCHDOWN Forte HITECH.

G. SUGARCANE

Pre-emergence application

Apply 1 – 1.6 L/ha **CLINCHER® S** on all soil types as a pre-emergence treatment. The higher rate is recommended on soils with more than 35 % clay and on all soil types where *P. maximum* is a problem and/or for improved control of *C. esculentus* and/or for longer residual control.

Apply **CLINCHER® S** at 2 L/ha if the soil organic matter content exceeds 1 % and the clay content exceeds 35 %.

Because it is not always possible to apply the herbicide prior to weed emergence, it is recommended to add 1.5 L/ha GRAMOXONE or ADAMA PARAQUAT to the above mentioned **CLINCHER® S** spray mixture where weeds have started to emerge.

To obtain good broadleaf weed control, it is recommended that GESAPAX 500 SC be added at a rate of 2 - 3 L/ha to the **CLINCHER® S**. The lower rate (2 L/ha) is recommended for light to medium soils and the higher rate (3 L/ha) for medium to heavy soils.

Alternatively, the broadleaf weeds may be controlled post-emergence with MCPA or 2,4-D amine. For full particulars consult the respective labels.

Post-emergence application

Since **CLINCHER® S** has no post-emergence activity, it will not control emerged weeds. It may, however, be applied post-emergence provided it is applied in a mixture with a suitable post-emergence herbicide, which will kill the emerged weeds. Such treatments are recommended below.

1. **CLINCHER® S plus GESAPAX 500 SC plus GRAMOXONE.**

Apply per hectare: 1 – 1.6 L **CLINCHER® S** in tank mix with 2 - 3 L GESAPAX 500 SC plus 1.5 L GRAMOXONE or ADAMA PARAQUAT.

Do not add a surfactant to this treatment.

2. **CLINCHER® S plus GESAPAX 500 SC.**

Apply per hectare: 1 – 1.6 L **CLINCHER® S** in tank mix with 6 L GESAPAX 500 SC. Add a non-ionic surfactant at a rate of 0.2 % by volume.

3. CLINCHER® S plus GESAPAX 500 SC plus MCPA or 2,4 -D.

Apply per hectare: 1 – 1.6 L **CLINCHER® S** in tank mix with 4 - 5 L GESAPAX 500 SC plus 3.5 L MCPA - potassium salt (400 g ae/L) or 3 L of 2,4 - D amine (480 g ae/L). Add a non-ionic surfactant at a rate of 0.2 % by volume.

4. CLINCHER® S plus DIURON 800 SC plus GRAMOXONE.

Apply per **hectare**: 1 – 1.6 L **CLINCHER® S** in tank mix with 2 – 2.5 L DIURON 800 SC plus 1.5 L GRAMOXONE or ADAMA PARAQUAT.

Do not add a surfactant to this treatment.

5. CLINCHER® S plus SENCOR 480 SC plus GRAMOXONE.

Apply per hectare: 1 – 1.6 L **CLINCHER® S** in a tank mix with 2 L SENCOR 480 SC plus 1.5 L GRAMOXONE or ADAMA PARAQUAT.

Do not add a surfactant to this treatment. SENCOR 480 SC should only be used on soils of between 6 % - 35 % clay.

Important

- All five of the above-mentioned post-emergence treatments should be applied not later than the 3-leaf stage of the grass weeds.
- Treatments 1, 4 and 5, which contain GRAMOXONE or ADAMA PARAQUAT, may be applied up to the 3-leaf stage of the crop.
- Treatment 2, which contains only **CLINCHER® S** and GESAPAX 500 SC, may be made by means of and overhead application, up to the 5-leaf stage of the crop. After the 5-leaf stage the spray must be directed between the sugarcane rows.
- Treatment 3, which contains either MCPA or 2,4 -D amine, should preferably be directed between the sugarcane rows. After the 5-leaf stage of the crop the spray must be directed between the sugarcane rows.
- The rate of **CLINCHER® S** in all five above-mentioned treatments and the rates of GESAPAX 500 SC in treatment 1 should be selected according to the directions under "pre-emergence application".
- The rate of GESAPAX 500 SC in treatment 3 should be selected according to the density of the grass infestation and the prevailing climatic conditions.
- Treatments 2 and 3 may not always give satisfactory control of *P. maximum*.
- Use the higher dosage rate of DIURON 800 SC in treatment 4 for longer residual control.
- Apply **CLINCHER® S** at 2 L/ha if the soil organic matter content exceeds 1 % and the clay content exceeds 35 %.

CALLISTO, COMPLEMENT , METAGAN®, GESAPAX®, GESAPRIM®, CONCEP®, IGRAN®, SORGOMIL®, GRAMOXONE®= Registered Trade marks of a Syngenta Group Company.

SENCOR® = Registered Trade Mark of Bayer (Pty) Limited SA.

STING® = Registered Trade Mark of Monsanto (Pty) Limited, SA.

HAMMER® = Registered Trade Mark of BASF.

AGIL® = Registered Trade Mark of ADAMA South Africa (Pty.) Ltd.

BREAKTHRU = Registered Trade name of De Gussa.

PENETREX and **SOLITAIRE** = Registered Trade name of SAFAGRIC.

AGRAL 90 and **TRONIC** = Registered Trade name of PLAASKEM.

WAARSKUWINGS

- Hanteer versigtig.
- Giftig indien ingesluk.
- Toksies vir visse.
- Berg in 'n koel plek.
- Berg weg van voedsel en voer.
- Hou buite bereik van kinders, oningeligte persone en diere.
- **Ingeval van vergiftiging, ontbied 'n geneesheer en toon hierdie etiket aan hom/haar.**
- **Herbetreding:** Moet nie behandelde gebiede binne 1 dag na toediening betree nie tensy beskermde oorklere gedra word.
- **Lugtoedoening:** Stel al die bewoners in die onmiddellike omgewing van die gebied wat bespuit gaan word in kennis en reik die nodige waarskuwings uit. Moet nie oor water of aangrensende gebiede spuit of die spuitnewel toelaat om dit te besoedel nie.

Hoewel hierdie middel omvattend onder 'n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie. Die werking en doeltreffendheid daarvan kan beïnvloed word deur faktore soos abnormale grond-, klimaats- en bergingstoestande, kwaliteit van die verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui word nie en die voorkoms van weerstand van die onkruid teen die betrokke middel sowel as die metode, tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei en die omgewing of nadelige invloede op mens of dier of vir 'n gebrek aan prestasie van die betrokke middel as gevolg van versuim van die gebruiker om etiketaanwysings na te kom, of as gevolg van die ontstaan van toestande wat nie kragtens die registrasie voorsien kon word nie. Raadpleeg die verskaffer in die geval van enige onsekerheid.

VOORSORGMAATREËLS

- Moet nie die spuitnewel inasem nie.
- Vermy velkontak.
- Was met seep en water na gebruik.
- Was besoedelde klere na gebruik.
- Moet nie eet, drink of rook tydens vermenging of toediening van die produk of voordat die hande en gesig gewas is nie.
- Vermy die wegdrywing van die spuitnewel na ander gewasse, weivelde, riviere, damme en plekke wat nie behandel moet word nie.
- Maak toedieningsapparaat skoon na gebruik. Gooi uitspoelwater weg waar dit nie gewasse, weiveld, riviere, damme en boorgate sal besoedel nie.
- Voorkom die besoedeling van voedsel, voer, drinkwater en eetgerei.

- Keer die leë houer oor die spuit-of mengtenk om en dreineer vir minstens 30 sekondes nadat die vloeい tot 'n drup verminder het. Spoel daarna die leë houer drie keer na mekaar met een kwart van die houervolume vars water en giet die spoelwater in die spuittenk of mengtenk oor. Kap gate in die drie-keer gespoelde houer waarna dit aan 'n goedgekeurde versamelaar of verwerker oorhandig moet word (www.croplife.co.za).
- Moet nie die houer begrawe, verbrand of aan enige ander partye skenk wat dit as houer vir voedsel of drinkgoed mag gebruik nie.

SIMPTOME VAN MENSLIKE VERGIFTIGING

Geen geval van menslike vergiftiging is aangeteken nie.

NOODHULPBEHANDELING

Bel dadelik 'n geneesheer indien vergiftiging vermoed word. Verwyder die pasiënt van enige verdere vergiftiging of blootstelling en plaas hom/haar in 'n goed geventileerde omgewing.

In geval van oogkontak hou ooglede oop en spoel met 'n egalige, lichte straal water vir ten minste 15 minute.

In geval van velkontak was met voldoende seep en water. Raadpleeg 'n geneesheer as vel irritasie voortduur.

Indien die middel ingesluk word, moet 'n groot hoeveelheid melk, eierwit of gelatienoplossing so spoedig as moontlik toegedien word, of indien dit nie beskikbaar is nie, groot hoeveelhede water. Moet nie braking veroorsaak nie of enige iets per mond toedien aan 'n bewusteloze persoon nie.

NOTA AAN GENEESHEER

Geen spesifieke teenmiddel is beskikbaar nie. As inname plaasgevind het veroorsaak braking of maagspoeling. Oorweeg die toediening van 'n waterige oplossing geaktiveerde mediese houtskool. Behandel simptomaties.

WEERSTANDBESTUUR

CLINCHER® S is 'n groepkode 15 onkruiddoder. Enige populasie van 'n spesifieke onkruid mag individue insluit wat 'n natuurlike weerstand teen **CLINCHER® S** of enige ander groepkode 15 onkruiddoder het. Indien hierdie onkruiddoders in herhaalde en eksklusiewe programme aangewend word, kan die weerstandbiedende individue uiteindelik die onkruid populasie oorheers. Hierdie weerstandbiedende onkruide sal waarskynlik nie deur **CLINCHER® S** of enige ander groepkode 15 onkruiddoder, beheer word nie.

Om weerstand teen onkruiddoders te vertraag:

- Vermy die herhaalde en eksklusiewe gebruik van onkruiddoders in dieselfde onkruiddoder groepkode. Wissel af met, of gebruik tenkmengels van produkte in verskillende onkruiddoder groepkodes.
- Integreer ander beheermaatreëls (chemies, verbouing, biologies) in onkruiddoder programme.

Vir spesifieke inligting oor weerstandsbestuur kontak die registrasiehouer van hierdie produk.

GEBRUIKSBEPERKINGS

NB. MOET NIE CLINCHER® S AS 'N VOOROPKOMS BEHANDELING IN MIELIES TOEDIEN NIE.

CLINCHER® S op groenbone is slegs geregistreer vir gebruik deur McCains op die kultivars Fortè, Masai en Dark Seeded Provider in die produksiegebiede van die Loskopskema, Letsitele, Ohrigstad en enkele gedeeltes van die Hoëveld.

CLINCHER® S mag sekere gewasse onder die volgende omstandighede beskadig:

- Ingeteelde ouerplante van mieliebasters. Raadpleeg in hierdie verband eers 'n verteenwoordiger van ADAMA South Africa (Pty.) Ltd, die verspreider of saadverskaffer.
- Tabak en voersorghum wat op baie sanderige en/of gruiserige grond geplant word, of waar vloedbesproeiing gebruik word.
- Graansorghum en voersorghum op gronde met 'n hoë persentasie (60 % of meer) fynsandinhoud en/of swak struktuur wat geneig is om toe te slaan en te verdig na reën en gevoglik swak deurlug is of graansorghum en voersorghum wat dieper as 50 mm geplant is.
- Graansorghum, voersorghum en droëbone op landerye met 'n hoë voorkoms van grondgedraagde siektes en/of waar monokultuur toegepas word.
- Droëbone onder warm, droë toestande veral wanneer 'n verdigte laag in die grond voorkom. Onder hierdie toestande kan bone meer vatbaar wees vir windskade.
- Sonneblomme en droëbone op versuite vlak, sanderige gronde van <100 cm diep met 'n ondeurdringbare klei-ondergrond.

CLINCHER® S kan net op voersorghum gebruik word wat sorghum x sorghum kruisings en sorghum x Sudan gras kruisings is. Kruisings met *Pennisetum* spp en kruisings wat die BMR gene bevat mag nie met **CLINCHER® S** gespuit word nie.

CONCEP® 960 EC saadbehandeling word slegs aanbeveel vir die gebruik saam met **CLINCHER® S** of DUAL GOLD en CLINCHER® S GOLD.

Belangrik

Indien ander onkruiddoders in kombinasie met **CLINCHER® S** gebruik word, moet die gebruiksbeperkings van hierdie onkruiddoders, soos op die betrokke etikette aangedui, nagekom word.

Waarskuwing: Moontlike beskadiging van triasien sensitiewe gewasse

- Waar gronde met kalk behandel is om die grond pH te verstel, word die moontlikheid van gewas beskadiging dramaties verhoog in gronde waar triasien voorheen toegedien is. Dit gebeur as gevolg van die triasien molekule wat op die klei kompleks vervang word met kalsium katione en die triasien dus meer beskikbaar word in die grondwater kompleks.
- Slegs mielies moet aangeplant word in die seisoen direk na die aanbring van grond pH verstellings met kalk.

- Geen triasien-sensitiewe gewasse moet geplant word in die seisoen na grond pH verstelling met kalk nie. Dit is selfs van toepassing indien triasiene teen wisselbou dosisse gespuit is in vorige jare.
- Triasien-sensitiewe gewasse sluit in alle breëblaargewasse soos die boon gewasse en sonneblomme asook alle kleingraangewasse soos koring.
- Hierdie waarskuwing waarborg egter nie dat geen skade aan selfs mielies in die daaropvolgende aanplanting sal voorkom nie aangesien groot volumes triasiene beskikbaar mag raak afhangende van die volume kalk wat toegedien word en die reënval wat kan voorkom.

Waarskuwing: Moontlike verhoogde effektiwiteit, fitotoksiteit en verlengde nawerking

- 'n Verhoging in die grond pH na vlakke bokant 7 skep toestande waar verhoogde effektiwiteit en verlaging in selektiwiteit kan voorkom. Hierdie verhoogde pH vlakke kan ook verlengde grondnawerking deur sekere onkruiddoders tot gevolg hê wat veral onder besproeiing die opvolg-gewaskeuse mag beïnvloed.
- Waar grond pH verstellings reeds gedoen is, moet gelet word wanneer sulfoniel ureum onkruiddoders, triazolopirimidien sulfonanilied onkruiddoders en imidasolinoon onkruiddoders wat almal baie sensitief is vir grond pH fluktuasies, reeds gebruik was of beplan word om te gebruik.

Kontak u plaaslike ADAMA Suid-Afrika (Pty) Ltd verteenwoordiger voordat op enige bekalkingsprogram besluit word om gewaskeuses en gewasbeskermingsprogramme te bespreek.

ONKRUIDE WAT BEHEER WORD

Die volgende onkruidsoorte word normaalweg beheer deur die vooropkomtoediening van **CLINCHER® S** teen die toedieningshoeveelhede soos hieronder aangedui:

Botaniese naam	Gewone naam
<i>Brachiaria eruciformis</i>	Litjie-sinjaalgras
<i>Chloris virgata</i>	Witpluim-Chloris
<i>Dactyloctenium aegyptium</i>	Hoenderspoor
<i>Digitaria sanguinalis</i>	Kruisvingergras
<i>Echinochloa crus-galli</i>	Hannepootmanna
<i>Eleusine indica</i>	Jongosgras
<i>Panicum maximum</i>	Gewone buffelsgras
<i>Panicum schinzii</i>	Soetbuffelsgras
<i>Pseudobrachiaria deflexa</i>	Bastersinjaalgras
<i>Setaria pallide-fusca</i>	Rooiborselgras
<i>Setaria verticillata</i>	Klitsborselgras

Botaniese naam	Gewone naam
<i>Tragus berteronianus</i>	Kleinwortelsaadgras
<i>Tragus racemosus</i>	Grootwortelsaadgras
<i>Urochloa mosambicensis</i>	Bosveldbeesgras
<i>Urochloa panicoides</i>	Beesgras

Onkruide wat wisselvallig beheer word

Botaniese naam	Gewone naam
<i>Amaranthus hybridus</i>	Gewone misbredie
<i>Amaranthus spinosus</i>	Doringmisbredie
<i>Amaranthus thunbergii</i>	Rooimisbredie
<i>Chenopodium carinatum</i>	Groenhondebossie
<i>Cleome monophylla</i>	Rusperbossie
<i>Commelina benghalensis</i>	Bengaalse wandelende Jood
<i>Cyperus esculentus</i>	Geeluintjie
<i>Datura ferox</i>	Groot stinkblaar
<i>Datura stramonium</i>	Stinkblaar
<i>Galinsoga parviflora</i>	Knopkruid
<i>Nicandra physaloides</i>	Basterappelliefie
<i>Portulaca oleracea</i>	Porslein

Belangrik

Geeluintjie (*Cyperus esculentus*)

Die beheer van *C. esculentus* kan verbeter mits aan die volgende voorwaardes voldoen word:

- Die plantproses onmiddellik voorafgegaan word deur 'n deeglike ploegbewerking met 'n skaarploeg.
- 'n Relatiewe fyn, egalige en ferm saadbed voorberei word.
- Die onkruiddodertoediening moet gevvolg word deur minstens 10 - 20 mm sagte deurdringende reën (of besproeiing) om die onkruiddoder in die grond in te loog voordat *C. esculentus* opkom (gewoonlik 7 - 10 dae na deeglike grondbewerking/ploeg). Die kans vir hierdie toestande om voor te kom, is groter tydens die laaste helfte van die plantseisoen (November). Namate die grond swaarder word, is meer reën of besproeiing nodig om goeie resultate te verkry. Om hierdie rede is beheer soms swak op turfgronde.

- Reënval na onkruiddodertoediening, maar voor *C. esculentus* opkoms is noodsaaklik vir optimale *C. esculentus* beheer. Gevolglik moet **CLINCHER® S** tydens of onmiddellik na die plantproses in klam grond toegedien word.
- Wanneer in droë grond geplant word (onvoldoende vog om *C. esculentus* te laat ontkiem), moet die toediening van **CLINCHER® S** uitgestel word tot so na as moontlik aan, maar beslis voor die eerste reën.

Grasbeheer

Grasdoders wat aan die chloorasetamied onkruiddodergroep behoort (wat **CLINCHER® S** insluit) word via die koleoptiel van grasonkruide opgeneem. Vir goeie grasbeheer moet hierdie onkruiddoders dus teen letale konsentrasies beskikbaar wees in die boonste ± 50 mm van die grondprofiel. Die adsorpsiekapasiteit van 'n grond vir hierdie onkruiddoders, sowel as die hoeveelheid water wat deur die grondprofiel beweeg met reën/besproeiing, bepaal die gevoglike konsentrasie van die onkruiddoders in die boonste lae van die grondprofiel. As gevog van die lae adsorpsiekapasiteit van sandgronde (0 – 15 % klei, < 1 % organiese materiaalinhou) kan bogenoemde onkruiddoders tot sub-letale vlakke in die boonste ± 50 mm verlaag word na die voorkoms van deurdringende reën (25 mm en meer per dag). Aanhoudende reën (50 mm en meer versprei oor 3 – 7 dae) sal dieselfde gevog hê. Dit kan dus gebeur dat grasse ontkiem as sulke toestande voorkom. Splittoedienings word aanbeveel indien **CLINCHER® S** op sulke gronde gebruik word. Deurdringende en/of aanhoudende reën na die splittoediening kan dieselfde gevog hê

GEBRUIKSAANWYSINGS

Gebruik slegs soos aangedui.

VERENIGBAARHEID

Die verenigbaarheid van **CLINCHER® S** met ander produkte kan beïnvloed word deur die formulasie van die betrokke produktes asook deur die kwaliteit van die water. Aangesien die formulasie van produktes kan verander sonder die medewete van ADAMA Suid-Afrika (Pty.)Ltd. en die kwaliteit van die water ook van plaas tot plaas kan varieer, moet 'n fisiese verenigbaarheidstoets altyd uitgevoer word voordat gespuit word.

CLINCHER® S is verenigbaar met CALLISTO (L6795), AGRAL 90 (L 2967), BREAKTHRU (L5895), COMPLEMENT SUPER (L8169), TRONIC (L3685), SOLITAIRE (L6962), GARDOMIL® GOLD 600 SC (L6246), GESAPRIM SUPER (L3914), SORGOMIL® GOLD 600 SC (L5897), GESAPRIM 90 WG (L4767), HAMMER® 100 SL (L5201), IGRAN® 500 SC (L0324), SENCOR® 480 SC (L3034), GRAMOXONE® (L1174), ADAMA PARAQUAT (L10792), STING® (L3066), MCPA, and 2 , 4-D amine soos op hierdie etiket aanbeveel.

MENGINSTRUKSIES

Plaas dop terug na gebruik

Maak die spuittenk halfvol met water en voeg dan die benodigde hoeveelheid **CLINCHER® S** by terwyl die water in die tenk geroer word. Vul die tenk verder totdat die verlangde volume verkry is.

Wanneer **CLINCHER® S** die spuittenk met IGRAN 500 SC of GESAPRIM SUPER of SENCOR 480 SC of SORGOMIL GOLD 600 SC of GESAPAX 500 SC of DIURON 800 SC of 2,4-D Amien of MCPA of HAMMER 100 SL gemeng word, moet laasgenoemde middels eerstelike bygevoeg word. **CLINCHER® S** moet dan laaste bygevoeg word net voordat die verlangde volume in die spuittenk bereik word. Wanneer GRAMOXONE, ADAMA PARAQUAT of STING

in 'n tenkmengsel ingesluit word, moet dit heel laaste, nadat al die ander middels reeds bygevoeg en deeglik gemeng is, in die sputtenk bygevoeg word net voordat die finale volume bereik word.

Die sputmengsel moet tydens vermenging en toediening voortdurend in roering gehou word.

Tenkmengsels moet onmiddellik uitgespuit word en nie toegelaat word om in die sputtenk te staan nie.

TOEDIENINGSTEGNIEKE

Na-plant vooropkoms

Wanneer in klam grond geplant word, moet **CLINCHER® S** binne drie dae na plant (maar verkieslik tydens plant) op 'n fyn, egalige, ferm en vars voorbereide onkruidvrye saadbed toegedien word. Om goeie resultate te verkry, is dit noodsaaklik dat die onkruiddodertoediening gevolg moet word deur reën of besproeiing voordat die onkruid opkom. Indien reën nie betyds voorkom nie en die onkruid begin opkom en ontwikkel, moet 'n vlak grondbewerking uitgevoer word om hierdie onkruid te vernietig en die onkruiddoder met die boonste 10 – 20 mm grondlagie te vermeng.

Wanneer in droë grond (onvoldoende vog vir ontkieming) geplant word, moet **CLINCHER® S** so na as moontlik aan, maar beslis voor die eerste reën toegedien word. Onkruide wat reeds opgekom het met toediening sal nie beheer word nie.

Na-opkoms (mielies en aartappels)

CLINCHER® S het beperkte na-opkoms effektiwiteit. Dit kan egter na opkoms van die gewas onmiddellik na 'n skoffelbewerking toegedien word, mits onkruid nie aanwesig is nie. Onkruide wat aanwesig is en nie deur die skoffelbewerking vernietig word nie sal nie beheer word nie.

Grondtoediening

CLINCHER® S kan met enige medium of hoëvolume sputtoerusting wat met 'n doeltreffende roermeganisme toegerus is en wat korrek gekalibreer is, toegedien word. Keuse en rangskikking van waaiertipe sputtpunte moet sodanig wees dat 'n egalige verspreiding en optimale herwinning van die onkruiddoder verkry word. Die aanbevolle hoeveelheid **CLINCHER® S** moet in minstens 200 L water/ha toegedien word.

Lugtoediening (Voor- en na-opkoms)

Hierdie produk mag slegs deur lugbespuiting toegedien word deur 'n geregistreerde lugbespuiting operateur met 'n korrek gekalibreerde, geregistreerde vliegtuig volgens die instruksies van SANS 10118 (Aerial application of Agricultural Remedies). Dit is belangrik om te verseker dat die sputmengsel eweredig oor die teikenarea versprei word en dat die verlies aan sputmengsel tydens toediening tot 'n minimum beperk word. Dit is dus belangrik om aan die volgende kriteria te voldoen:

a) Toediening parameters:

- **Volume:** 'n Volume van 30 L/ha word vir vooropkoms bespuitings aanbeveel en 35 L/ha word vir na-opkoms bespuitings aanbeveel. Aangesien hierdie produk nie teen 'n verlaagde volume getoets is nie, kan die registrasiehouer nie effektiwiteit waarborg, of verantwoordelik gehou word vir enige nadelige effekte indien hierdie produk teen 'n laer volume, as hierbo aanbeveel, uit die lug toegedien word nie.

- **Druppelbedekking:** ‘n Druppelbedekking van 20 – 30 druppels/cm² moet op die teikenarea herwin word vir vooropkoms bespuiting en 30 – 45 druppels/cm² vir naopkoms bespuitings.
- **Druppelgrootte:** ‘n Druppelspektrum met ‘n VMD van 350 – 400 mikrons word vir vooropkoms bespuitings aanbeveel en 300 – 350 mikrons vir na-opkoms bespuitings. Verseker dat die produksie van fyn druppels (kleiner as 150 mikrons – hoë drywing en verdampingspotensiaal) tot ‘n minimum beperk word.
- **Vlieghoogte:** Die hoogte van die sputbalk moet op 3 - 4 meter bo die teiken gehandhaaf word. Moet nie sput wanneer die vliegtuig aan die bopunt is van, of tydens ‘n duik nie, of terwyl dit uitklim of draai nie.

b) Toerusting:

- Gebruik gesikte sputapparaat (hidroiese of roterende sputkoppe) wat die vereiste druppelgrootte en bedekking sal produseer, maar wat die minste verlies van produk deur endodrywing (binne die teikenarea) of eksodrywing (buite die teikenarea) sal verseker. Die operator moet ‘n stelsel kies wat ‘n druppelspektrum met die kleinste moontlike relatiewe span sal produseer.
- Al die sputneuse / atomiseerders moet in die binnste 60 % - 75 % van die vlerkspan geplaas word om die beweging van druppels in die vlerkvorteks in te beperk.

c) Meteorologiese toestande:

- Die verskil in temperatuur tussen die nat- en droëboltermometer van ‘n swaaihigrometer, moet nie 8°C oorskry nie. Die byvoeging van ‘n gesikte anti-evaporant word aanbeveel indien die VMD van die druppels kleiner as 200 - 250 mikrons is.
- Stop bespuiting indien die windspoed 15 km/uur oorskry of verminder tot laer as 5 km/uur.
- Hierdie produk moet nie uit die lug toegedien word tydens onstabiele, turbulente toestande gedurende die hitte van die dag wanneer styg en dalende konveksie windbeweging plaasvind nie.
- Dit is belangrik om daarop te let dat die lugtoediening van hierdie produk onder temperatuur inversie toestande (deur bo of binne die inversie laag te sput) tot die volgende probleme mag aanleiding gee
 - Verlaagde effektiwiteit aangesien die druppels as ‘n wolk in die lug bly hang en moontlik verdamp (onvoldoende bedekking op teiken), of
 - Skade aan ander nie-teiken gewasse of ander sensitiewe areas a.g.v die wegdryf van die sputwolk tot by daardie area.

CLINCHER® S en CLINCHER® S plus GESAPAX 500 SC kan deur middel van lugbespuiting toegedien word mits die sputstof egalig oor die teikengebied versprei word en die verlies aan sputmiddel tydens toediening tot ‘n minimum beperk word.

Dit is noodsaaklik om ‘n versekering van die sputoperator te verkry dat aan bogenoemde vereistes voldoen sal word.

Toediening deur spilpuntbesproeiing

CLINCHER® S mag d.m.v. besproeiingswater vooropkoms (na plant, maar vooropkom van die onkruide of gewas) teen toedieningshoeveelhede soos aanbeveel op hierdie etiket, toegedien

word. Gebruik slegs spilpunte wat water egalig toedien. Berei 'n mengsel voor met 'n minimum van een deel water tot een deel onkruiddoder en spuit hierdie mengsel met 'n positief verplasende pomp in die spilpuntsisteem in. Deur die inspuit van 'n groter volume, meer verdunde mengsel per uur kan 'n meer akkurate kalibrasie van die meettoerusting verkry word. Handhaaf voldoende roering om die onkruiddoder in suspensie te hou. Dien toe in 12,5 - 25 mm water. Gebruik die lae volume water (12,5 mm) op growwe tekstuur gronde en die hoë volume water (25 mm) op gronde met 'n fyner tekstuur. Meer as 25 mm water met toediening mag die onkruiddoder dieper as die effektiewe grondsone beweeg en sodoende onkruidbeheer nadelig beïnvloed.

Voorsorgmaatreëls vir spilpunttoediening:

- Dien slegs toe deur 'n spilpunt wat oor 'n antinewel sisteem beskik en kleppe wat die besoeding na die bron sal verhoed gedurende die afsluit of oorloop van die oplossingstenk.
- Om voldoende vermenging te verseker, spuit in voor enige reghoekige draai op die hooflyn.
- Chemiese inspuitpompe en waterpompe moet ineengeskakelde beheermeganismes hê om gelyktydige afsluiting te verseker.
- Toediening wanneer spuitnewelwegdrywing 'n probleem mag wees bv. onder winderige toestande, of as lasplekke of verbinding lek, of as spuitpunte nie uniforme verspreiding lewer nie, mag skade aan die gewas veroorsaak.
- Indien sprinkelaarspuitpatrone nie voldoende oorvleuel nie, kan swak beheer verkry word. Indien sprinkelaarspuitpatrone egter oormatig oorvleuel, kan skade aan die gewas of onaanvaarbare residue voorkom.

TOEDIENINGSHOEVEELHEDE

A. GRONDBONE, GROENBONE, DROËBONE, NIERBONE, SONNEBLOMME, KATOEN, SOJABONE EN LUPIENE

TABEL 1: Die volgende toedieningshoeveelhede van CLINCHER® S word vir die verskillende gewasse op spesifieke grondtipes en vir die beheer van sekere onkruide aanbeveel:

Grondtype	% Klei	CLINCHER® S (L/ha)
Sand/Leemsand/sandleem	0 - 20	0.6 – 0.8
Sandkleileem	21 - 30	0.8 – 1.0
Sandkleileem/Sandklei	> 30	1.0 – 1.3

Gebruik die hoër toedieningshoeveelheid van CLINCHER® S vir verbeterde **geeluintjie** (*C. esculentus*) beheer of waar hoë infestasies van **kruisvingergras** (*D. sanguinalis*) voorkom of waar die organiese materiaalinhoud van die grond 1 % oorskry.

CLINCHER® S kan vooropkoms van glifosaat weerstandbiedende katoen en sojabone gebruik word in 'n kombinasie met TOUCHDOWN Forte HITECH wat na-opkoms toegedien word.

Belangrik (alleenlik grondbone)

- Ten einde goeie beheer van breëblaaronkruide te verkry, kan IGRAN 500 SC by die **CLINCHER® S** gevoeg word teen hoeveelhede per grondtype soos aanbeveel op die IGRAN 500 SC etiket. IGRAN 500 SC word slegs aanbeveel waar oorhoofse sprinkelbesproeiing toegepas word.

Tenkmengsels met HAMMER 100 SL

Die volgende toedieningshoeveelhede as tenkmengsel van **CLINCHER® S** plus HAMMER 100 SL word aanbeveel vir verskillende gewasse op 'n verskeidenheid grondtipes vir die beheer van sekere onkruide.

TABEL 2: CLINCHER® S plus HAMMER 100 SL in 'n tenkmengsel op droëbone:

Grondtype	% Klei	CLINCHER® S (L/ha)	HAMMER 100 SL (L/ha)
Sand/leemsand	0 – 15	0.6	0.3
Sandleem/sandkleileem	16 – 25	0.6	0.4
Sandkleileem/sandklei	26 – 35	0.8	0.5
Sandklei/Turf	> 35	NIE AANBEVEEL NIE	

TABEL 3: CLINCHER® S plus HAMMER 100 SL in 'n tenkmengsel op grondbone en sojabone:

Grondtype	% Klei	CLINCHER® S (L/ha)	HAMMER 100 SL (L/ha)
Sand/leemsand/sandleem	0 – 25	0.5 – 0.8	0.4
Sandkleileem/sandklei	26 – 35	0.8 – 1.0	0.5
Sandklei/Turf	> 35	NIE AANBEVEEL NIE	

Opmerkings (Tabelle 2 en 3)

- 'n Tenkmengsel van **CLINCHER® S** plus HAMMER 100 SL mag die gewas beskadig indien gebruik op 'n grond met 'n pH (H_2O) van meer as 7.
- Swak beheer van sekere onkruide mag voorkom onder die volgende omstandighede:
 - 'n Swak voorbereide saadbed.
 - Gronde met 'n pH (H_2O) van minder as 5.
 - Droë toestande direk na toediening of onvoldoende reënval op swaar gronde.
- Die gebruiksterkte van **CLINCHER® S** in TABEL 3 moet ooreenkomsdig die styging in die klei gehalte van die grond binne 'n grondtipegroep, verhoog word.

- Raadpleeg die HAMMER 100 SL etiket vir volle besonderhede.

Tenkmengsel met SENCOR 480 SC (sojabone).

Die volgende toedieningshoeveelhede as tenkmengsels van **CLINCHER® S** plus SENCOR 480 SC word aanbeveel op sojabone vir die beheer van onkruide soos op die SENCOR 480 SC etiket addisioneel tot die wat deur **CLINCHER® S** beheer word.

TABEL 4: CLINCHER® S plus SENCOR 480 SC in 'n tenkmengsel op sojabone:

Grondtipe	% Klei	CLINCHER® S (L/ha)	HAMMER 100 SL (L/ha)
Sand	0 – 10	NIE AANBEVEEL NIE	
Leemsand/sandleem	11 – 20	0.6 – 0.8	0.54
Sandkleileem	21 – 35	0.8 – 1.0	0.70
Sandkleileem/sandklei/turf	>35	NIE AANBEVEEL NIE	

Opmerkings (Tabel 4)

- Gebruik die hoër toedieningshoeveelhede **CLINCHER® S** vir verbeterde beheer van **geeluintjie** (*C. esculentus*) of waar hoë infestasies **kruisvingergras** (*D. sanguinalis*) voorkom
- Gebruik die **CLINCHER® S** plus SENCOR 480 SC mengsel slegs op gronde met meer as 1 % organiese materiaal
- Sien SENCOR 480 SC etiket vir kutivarbeperkings.
- Moet nie **CLINCHER® S** plus SENCOR 480 SC op sojabone toedien op grond met uitsonderlike lae of hoë pH (H_2O) waardes (laer as 4,5 en hoër as 7), gronde met voedingstekorte of gronde wat onderhewig kan wees aan versuiptoestande nie, aangesien beskadiging mag voorkom.
- Die toediening van **CLINCHER® S** plus SENCOR 480 SC op ligte gronde vroeg in die seisoen wanneer lae nagtemperature voorkom, kan beskadiging tot gevolg hê.
- Oormatige toediening tydens die verkeerde groeistadium of enige ander gebruik wat nie in ooreenstemming met die **CLINCHER® S** of SENCOR 480 SC etiket is nie, kan die groei van die gewas belemmer of nadelig beïnvloed.
- Raadpleeg die SENCOR 480 SC etiket vir die volledige besonderhede.

B. AARTAPPELS (somerreënvalgebied alleenlik)

Gebruik 1.2 L/ha **CLINCHER® S** op alle grondtipes. Om goeie beheer van breëblaaronkruid te verkry, kan SENCOR 480 SC teen 1.1 L/ha by die **CLINCHER® S** gevoeg word. Wanneer dit in kombinasie met SENCOR 480 SC gebruik word en waar aartappels gedurende die reënseisoen of onder besproeiing geplant word, kan die hoeveelheid **CLINCHER® S** tot 1.0 L/ha verminder word. Waar aartappels egter onder droëlandstoestande geplant word, voor die aanvang van die reënseisoen, moet die hoër hoeveelheid **CLINCHER® S** gebruik word, selfs in 'n kombinasie met SENCOR 480 SC.

Die beperkings ten opsigte van SENCOR 480 SC soos op die etiket aangegee, moet nagekom word.

Operd

Nadat die onkruiddoder toegedien is, moet operdbewerkings so lank as moontlik uitgestel word, aangesien sodanige bewerkings onbehandelde grond na die oppervlak sal bring wat nuwe onkruidgroei tot gevolg mag hê.

CLINCHER® S kan ook na-opkoms van die aartappels en nadat opgeërd is, toegedien word. Gerigte bespuiting is in so 'n geval verkieslik, maar nie noodsaaklik nie.

C. GRAANSORGHUM / VOERSORGHUM

CLINCHER® S kan in graansorghum en voersorghum gebruik word mits die saad vooraf deeglik volgens voorskrif met CONCEP® 960 EC behandel is. Die toedieningshoeveelhede in Tabel 5 word aanbeveel vir die beheer van eenjarige grasse en gedeeltelike beheer van *C. esculentus*.

CLINCHER® S kan net op voersorghum gebruik word wat sorghum x sorghum kruisings en sorghum x sudan gras kruisings is. Kruisings met *Pennisetum* spp en kruisings wat die BMR gene bevat mag nie gebruik word nie.

CONCEP® 960 EC saadbehandeling word slegs aanbeveel vir die gebruik saam met **CLINCHER® S, CLINCHER® S GOLD of DUAL GOLD**

TABEL 5: Toedieningshoeveelhede van CLINCHER® S op CONCEP 960 EC behandelde saad:

Grondtipe	% Klei	CLINCHER® S (L/ha)
Sand/leemsand/sandleem	0 – 20	NIE AANBEVEEL NIE
Sandkleileem	21 – 30	0.8
Sandklei	31 – 40	0.9
Turf	> 40	0.9 – 1.3

Belangrik

- Op turfgronde mag 1.3 L/ha **CLINCHER® S** nodig wees vir goeie beheer van *B. eruciformis*. Dit mag ook die beheer van *C. esculentus* verbeter
- Gebruik die hoër toedieningshoeveelheid van **CLINCHER® S** waar hoë infestasies van *D. sanguinalis* (**kruisvingergras**) voorkom
- Indien graansorghum en voersorghumsaad nie vooraf deeglik met CONCEP 960 EC behandel is nie, kan **CLINCHER® S** ernstige skade aan die gewas veroorsaak.
- **CLINCHER® S** kan graansorghum en voersorghum tydelik beskadig indien baie nat grondtoestande 4 – 6 weke na plant voorkom. Die gewas sal gewoonlik hierdie beskadiging ontgroeи sonder 'n effek op opbrengs.

BEHEER VAN BREËBLAARONKRUIDE (graansorghum alleenlik)

'n Tenkmengsel van **CLINCHER® S** plus SORGOMIL GOLD 600 SC teen 0.5 L/ha + 3 L/ha kan vooropkoms in graansorghum toegedien word op gronde wat 21 – 30 % klei bevat en teen 0.6 L/ha + 3.7 L/ha op gronde wat 31 – 35 % klei bevat. (Raadpleeg die SORGOMIL GOLD 600 SC etiket.)

Op alle grondtipes kan 'n voor-opkomsbehandeling met **CLINCHER® S** vir grasbeheer opgevolg word met 'n vroeë na-opkomsbehandeling met GESAPRIM SUPER of GESAPRIM SUPER plus 2,4-D om die breëblaaronkruide te beheer. (Raadpleeg die GESAPRIM SUPER etiket.)

Alternatiewelik kan 'n vooropkomsbehandeling van **CLINCHER® S** ook opgevolg word deur 'n vroeër na-opkomsbehandeling met SORGOMIL GOLD 600 SC. SORGOMIL GOLD 600 SC word slegs aanbeveel vanaf die 5-blaarstadium van graansorghum.

Die SORGOMIL GOLD 600 SC toediening hoeveelhede mag nie 2 L/ha oorskry waar wisselbou toegepas word nie. (Raadpleeg die SORGOMIL GOLD 600 SC etiket in hierdie verband.)

TABEL 6: Toedieningshoeveelhede CLINCHER® S gevvolg deur SORGOMIL GOLD 600 SC op graansorghum:

Grondtype	% Klei	Vooropkoms CLINCHER® S (L/ha)	Na-opkoms SORGOMIL GOLD 600 SC (L/ha)
Sand/ leemsand	0 – 15		NIE AANBEVEEL NIE
Sandleem	16 – 20	0.5	2.6
Sandkleileem	21 – 30	0.6	3.0
Swaarder grone insluitend turf	>30	0.7 – 1.0	3.0

Belangrik

- Die benattingsmiddel COMPLEMENT SUPER moet by alle na-opkomsbehandelings gevoeg word, behalwe waar GESAPRIM SUPER plus 2,4-D amien gebruik word.
- Op turfgronde kan 1 L/ha **CLINCHER® S** nodig wees vir goeie beheer van *B. eruciformis* en kan dit ook gebruik word om die beheer van *C. esculentus* te verbeter.

D. TABAK (slegs somerreënvalstreek)

Dien **CLINCHER® S** toe as 'n vol oppervlakbespuiting binne 3 dae na uitplant van die tabak terwyl die plantjies nog verlep is. Waar **CLINCHER® S** op nie-verlepte tabakplantjies toegedien word moet die bespuiting so gerig word dat dit nie die plantkelk binnedring, waar dit die groepunt kan beskadig nie. Die blare van aktiefgroeiende tabak kan brandskade opdoen waar dit met **CLINCHER® S** gespuit word. Op ligte gronde (0 – 10 % klei) moet **CLINCHER® S** net tussen die plantrye toegedien word op so 'n manier dat 'n onbehandelde strook van ongeveer 20 - 25 cm wyd, bo-op die walle gelaat word (d.i. 10 cm aan weerskante van die plantry).

Enige bestaande onkruid moet verwijderd word voor **CLINCHER® S** toegekondig word. Dit kan met die hand of meganies of deur toediening van GRAMOXONE of ADAMA PARAQUAT geskied onmiddellik voor uitplant. Enige groeiende onkruid teenwoordig ten tye van toediening sal nie beheer word nie.

Waar tabak op walle geplant word, moet van 110° spuitpunte gebruik gemaak word wat vanaf 'n posisie bokant die holvoor spuit. Dit sal meer egale verspreiding van die onkruiddoder tot gevolg hê.

Binne 2 - 3 dae na **CLINCHER® S** bespuiting moet sprinkelbesproeiing van minstens 10 mm, maar nie meer as 15 mm op grond met minder as 35 % klei en minstens 20 mm, maar nie meer as 30 mm op gronde met meer as 35 % klei toegekondig word ten einde die **CLINCHER® S** te aktiveer.

Slegs sterk, gesonde plantjies moet uitgeplant word.

Indien van die wortels van 'n uitgeplante tabakplant blootgestel word aan **CLINCHER® S** tydens toediening, sal die plant nadelig beïnvloed word. Dit is dus belangrik dat uitplant sorgvuldig geskied.

TABEL 7: Toedieningshoeveelhede **CLINCHER® S op tabak aanbeveel:**

Grondtipe	% Klei	CLINCHER® S (L/ha)
Sand	0 - 10	0.5
Leemsand/sandleem	11 – 20	0.7
Sandkleileem	21 - 35	1.0
Sandklei	> 35	1.4

E. EUCALYPTUS spp. EN DENNEPLANTASIES

CLINCHER® S kan onmiddellik na uitplant van die jong boompies, maar vooropkoms van die onkruid, op 'n goed voorbereide, onkruidvrye saadbed toegekondig word.

Indien grasonkruide alreeds ten tye van plant opgekom het, word aanbeveel dat 'n tenkmengsel van GRAMOXONE of ADAMA PARAQUAT en **CLINCHER® S** die plantproses voorafgaan.

Dien GRAMOXONE of ADAMA PARAQUAT toe teen die hoeveelhede soos aanbeveel deur die vervaardiger. Dit sal die bestaande onkruid vernietig en 'n vooropkomtoestand skep wat **CLINCHER® S** sal toelaat om doeltreffend te werk.

Indien grasonkruide teenwoordig is na die bome reeds geplant is, kan die **CLINCHER® S** toediening 'n week later deur AGIL® 100 EC (L4694), opgevolg word, soos aangedui deur die vervaardiger, om grasse wat opgekom het te vernietig.

If grass weeds are present after the trees have been planted, the **CLINCHER® S** application may be followed one week later by AGIL® 100 EC (L4694), as recommended by the manufacturer, to kill the emerged grasses.

TABEL 8: Toedieningshoeveelhede CLINCHER® S op *Eucalyptus* spp. en denneplantasies:

4Grondtipe	% Klei	CLINCHER® S (L/ha)
Sand/leemsand/sandleem	0 - 20	1.0
Sandkleileem	21 - 30	1.3
Sandkleileem/sandklei	> 30	1.6 – 2.0

Gebruik die hoër dosis wanneer die organiese material 1 % oorskry.

F. MIELIES

i) Residuele beheer

Residuele beheer van grasse na die vooropkoms toediening van DUAL GOLD (L5749) of CLINCHER® S GOLD (L10748) kan verleng word deur 'n na-opkoms toediening van CLINCHER® S. Hierdie toediening moet na 'n deeglike bewerking plaasvind omdat grasse wat reeds opgekom het, nie beheer sal word nie.

TABEL 9: CLINCHER® S na-opkoms toegedien op mielies:

Grondtipe	% Klei	CLINCHER® S (L/ha)
Sand	0 – 10	0.35
Leemsand/sandleem	11 – 20	0.30
Sandkleileem	21 – 30	0.35
Sandkleileem/sandklei	31 – 40	0.35 – 0.50
Sandklei/Turf	41 – 50	0.35 – 0.50

Opmerkings

Indien die DUAL GOLD of CLINCHER® S GOLD plus CLINCHER® S splittoediening geselekteer word (vgl. Tabel 3 van DUAL GOLD of CLINCHER® S GOLD etiket) op gronde wat meer as 30 % klei bevat, kan die dosis van die CLINCHER® S aangepas word na gelang van die vooropkomsbeheer wat verkry is en die heersende weerstoestande.

Die hoër toedieningshoeveelheid van CLINCHER® S kan gebruik word indien grasonkruid begin opkom ten tye van die na-opkomstoediening.

Om breëblaaronkruid effekief te beheer kan GESAPRIM SUPER gevoeg word by bogenoemde hoeveelhede CLINCHER® S. Raadpleeg die GESAPRIM SUPER etiket (vgl. Tabel 1 van GESAPRIM SUPER etiket). Moet nie 2,4-D amien in tenkmengsel met CLINCHER® S op mielies gebruik nie.

ii) Residuele beheer met uitklopaksie

Na-opkoms toediening van CLINCHER® S plus CALLISTO plus GESAPRIM SUPER plus benattingsmiddel

- **CALLISTO** moet na-opkoms toegedien word wanneer
 - die teiken breëblaaronkruide in die 2- tot 6-blaarstadium is.
 - die teiken grasse in die 2 – 3 – blaarstadium is.
- **Aanbevole benatters***: In alle na-opkomstoedienings van **CALLISTO** moet een van die volgende benatters gebruik word :
 - Agral teen 200 ml/100 L sputtvolume
 - Breakthru teen 50 ml/100 L sputtvolume
 - Complement Super 100 ml/ha
 - Penetrex teen 500 ml/100 L sputtvolume
 - Solitaire teen 100 ml/100 L sputtvolume
 - Tronic teen 500 ml/ha
- Om die doeltreffendheid in groter breëblaaronkruide te verbeter, kan 250 ml 2,4 D by die tenkmengsels soos hieronder aangedui, gevoeg word. Die byvoeging van 2,4 D word aanbeveel vir die beheer van purperwinde en ander probleem onkruide
- Hierdie na-opkoms toediening moet voorafgegaan word deur 'n vooropkoms bespuiting van **CALLISTO**, **DUAL GOLD**, **CLINCHER® S GOLD**, **GARDOMIL GOLD** of **GESAPRIM SUPER** soos aangedui op die geregistreerde etikette.

CALLISTO	plus CLINCHER® S	plus GESAPRIM SUPER	plus aanbevole benatter*
104 ml/ha	135 - 508 ml/ha	416 ml/ha	
Weke beheer	Botaniiese naam	Gewone naam	
4	<i>Amaranthus hybridus</i>	Gewone misbredie	
4	<i>Crotalaria sphaerocarpa</i>	Mielie-Crotalaria	
4	<i>Galinsoga parviflora</i>	Knopkruid	
4	<i>Hibiscus trionum</i>	Terblansbossie	
4	<i>Tagetes minuta</i>	Kakiebos	
4	<i>Xanthium strumarium</i>	Kankerroos	

CALLISTO 104 ml/ha	plus CLINCHER® S 203 – 508 ml/ha	plus GESAPRIM SUPER 416 ml/ha	plus die aanbevole benatter*
Weke beheer	Botaniese naam	Gewone naam	
Bogenoemde onkruide plus			
4	<i>Cleome monophyla</i>	Rusperbossie	
4	<i>Datura ferox</i>	Grootstinkblaar	
4	<i>Datura stramonium</i>	Stinkblaar	

CALLISTO 156 ml/ha	plus CLINCHER® S 203 – 508 ml/ha	plus GESAPRIM SUPER 416 ml/ha	plus die aanbevole benatter*
Weke beheer	Botaniese naam	Gewone naam	
Bogenoemde onkruide plus			
8	<i>Bidens bipinnata</i>	Spaanse knapsekêrel	
8	<i>Bidens pilosa</i>	Knapsekêrel	
8	<i>Datura ferox</i>	Grootstinkblaar	
8	<i>Galinsoga parviflora</i>	Knopkruid	
8	<i>Tagetes minuta</i>	Kakiebos	

CALLISTO 156 ml/ha	plus CLINCHER® S 305 – 508 ml/ha	plus GESAPRIM SUPER 416 ml/ha	plus die aanbevole benatter*
Weke beheer	Botaniese naam	Gewone naam	
Bogenoemde onkruide plus			
4	<i>Citrullus lanatus</i>	Karkoer	

CALLISTO 208 ml/ha	plus CLINCHER® S 271 – 508 ml/ha	plus GESAPRIM SUPER 416 ml/ha	plus die aanbevole benatter*
Weke beheer	Botaniese naam	Gewone naam	
Bogenoemde onkruide plus			
4	<i>Commelina benghalensis</i>	Bengaalse wandelende Jood	
4	<i>Ipomoea purpurea</i>	Purperwinde	
4	<i>Tribulus terrestris</i>	Dubbeltjie	
8	<i>Cleome monophylla</i>	Rusperbossie	
8	<i>Hibiscus trionum</i>	Terblansbossie	

CALLISTO 208 ml/ha	plus CLINCHER® S 406 – 508 ml/ha	plus GESAPRIM SUPER 416 ml/ha	plus die aanbevole benatter*
Weke beheer	Botaniese naam	Gewone naam	
Bogenoemde onkruide plus			
4	<i>Digitaria sanguinalis</i>	Kruisvingergras	
4	<i>Eleusine indica</i>	Jongosgras	
8	<i>Amaranthus hybridus</i>	Gewone misbredie	
8	<i>Commelina benghalensis</i>	Bengaalse wandelende Jood	
8	<i>Ipomoea purpurea</i>	Purperwinde	
8	<i>Tribulus terrestris</i>	Dubbeltjie	

CALLISTO 260 ml/ha	plus CLINCHER® S 339 – 508 ml/ha	plus GESAPRIM SUPER 416 ml/ha	plus die aanbevole benatter*
Weke beheer	Botaniese naam	Gewone naam	
Bogenoemde onkruide plus			
4	<i>Hibiscus cannabinus</i>		Wildestokroos
8	<i>Citrullus lanatus</i>		Karkoer
8	<i>Digitaria sanguinalis</i>		Kruisvingergras
8	<i>Eleusine indica</i>		Jongosgras

CALLISTO 260 ml/ha	plus CLINCHER® S 508 ml/ha	plus GESAPRIM SUPER 416 ml/ha	plus die aanbevole benatter*
Weke beheer	Botaniese naam	Gewone naam	
Bogenoemde onkruide plus			
8	<i>Crotalaria sphaerocarpa</i>		Mielie-Crotalaria
Tot en met 80 % onderdrukking van die volgende onkruide:			
8	<i>Chloris virgata</i>		Witpluimchloris
8	<i>Cyperus esculentus</i>		Geeluintjie
8	<i>Hibiscus cannabinus</i>		Wildestokroos
8	<i>Urochloa panicoides</i>		Beesgras
8	<i>Xanthium strumarium</i>		Kankerroos

Raadpleeg die CALLISTO, GESAPRIM SUPER, BREAKTHRU, COMPLEMENT SUPER, PENETREX, SOLITAIRE, TRONIC en AGRAL 90 etikette vir waarskuwings, voorsorgmaatreëls en gebruiksaanwysings.

iii) Na-opkomstoedienings op glifosaat-weerstandbiedende mielies

CLINCHER® S kan in tenkmengsels toegedien word saam met CALLISTO and TOUCHDOWN Forte HITECH op glifosaat-weerstandbiedende mielies om uitklop en residuale onkuidbeheer te verskaf.

Enige individuele plante wat nie die glifosaat geen bevat nie en met glifosaat bevattende produkte soos **TOUCHDOWN Forte HITECH** gespuit word sal afsterf. Voorsorg moet getref word om nie die tenkmengsel op konvensionele mielies (nie glifosaat weerstandbiedende

mielies) te spuit nie. Volg die etiket aanwysings vir tenkmengsels op glifosaat weerstandbiedende mielies soos verduidelik op die TOUCHDOWN Forte HITECH etiket

Indien **CLINCHER® S** met CALLISTO en TOUCHDOWN Forte HITECH in tenkmengsels gemeng word moet

- ammonium sulfaat soos Velocity Glyfo gebruik word om die kwaliteit van die water te herstel;
- geen bymiddels gebruik word nie;
- geen ander atrasien bevattende middel bygevoeg word nie;
- die TOUCHDOWN Forte en CALLISTO etikette noukeurig gevolg word.

CLINCHER® S plus CALLISTO mag onder geen omstandighede gespuit word met enige ander glifosaat bevattende middels anders as TOUCHDOWN Forte HITECH nie.

G. SUIKERRIET

Vooropkomstoediening

Gebruik 1.0 – 1.6 L/ha **CLINCHER® S** op alle grondtipes as 'n vooropkomsbehandeling. Die hoër dosis word aanbeveel op grond met meer as 35 % klei en op alle grondtipes waar *P. maximum* 'n probleem is en/of om die beheer van *C. esculentus* te verbeter en/of waar langer nawerking benodig word.

Indien die organiese materiaalinhoud van die grond 1 % oorskry, en die klei inhoud meer as 35 % is, moet 2.0 L/ha **CLINCHER® S** gebruik word .

Omdat dit nie altyd moontlik is om die onkruiddoder toe te dien voordat die onkruid opkom nie, word aanbeveel dat 1.5 L GRAMOXONE of ADAMA PARAQUAT by bogenoemde **CLINCHER® S** spuitmengsel gevoeg word waar onkruide reeds begin opkom het.

Om goeie beheer van breëblaaronkruid te verkry, word aanbeveel dat GESAPAX 500 SC teen 'n hoeveelheid van 2 – 3 L/ha by die **CLINCHER® S** gevoeg word. Die kleiner hoeveelheid (2 L/ha) word aanbeveel op ligte tot medium gronde en die groter hoeveelheid (3 L/ha) op medium tot swaar gronde.

Alternatiewelik kan die breëblaar onkruide na-opkom beheer word met MCPA of 2,4-D amien. Vir volle besonderhede raadpleeg die onderskeie etikette.

Na-opkomstoediening

Omdat **CLINCHER® S** geen na-opkoms aktiwiteit het, beheer dit nie onkruide wat reeds opgekom het nie. Dit kan egter na-opkoms toegediend word mits dit in 'n mengsel met 'n gesikte na-opkomsonkruiddoder gedoen word wat die onkruid wat reeds opgekom het, kan vernietig. Sulke behandelings word hieronder aanbeveel.

1. **CLINCHER® S plus GESAPAX 500 SC plus GRAMOXONE of ADAMA PARAQUAT.**

Dien toe per hektaar: 1.0 – 1.6 L **CLINCHER® S** in tenkmengsel met 2.0 – 3.0 L GESAPAX 500 SC plus 1.5 L GRAMOXONE of ADAMA PARAQUAT.

Moet nie 'n benattingsmiddel by hierdie behandeling voeg nie.

2. CLINCHER® S plus GESAPAX 500 SC.

Dien toe per hektaar: 1.0 – 1.6 L **CLINCHER® S** in tenkmengsel met 6.0 L GESAPAX 500 SC. Voeg 'n nie-ioniese benattingsmiddel by teen 0.2 % per volume.

3. CLINCHER® S plus GESAPAX 500 SC plus MCPA of 2,4 - D amien.

Dien toe per hektaar: 1.0 – 1.6 L **CLINCHER® S** in tenkmengsel met 4.0 – 5.0 L GESAPAX 500 SC plus 3.5 L MCPA - kaliumsout (400 g se/L) of 3.0 L 2,4-D amien (480 g se/L). Voeg 'n nie-ioniese benattingsmiddel by teen 0.2 % per volume.

4. CLINCHER® S plus DIURON 800 SC plus GRAMOXONE

Dien toe per hektaar: 1.0 – 1.6 L **CLINCHER® S** in 'n tenkmengsel met 2.0 – 2.5 L DIURON 800 SC plus 1.5 L GRAMOXONE of ADAMA PARAQUAT.

Moet nie 'n benattingsmiddel by hierdie behandeling voeg nie.

5. CLINCHER® S plus SENCOR 480 SC plus GRAMOXONE of ADAMA PARAQUAT.

Dien toe per hektaar: 1.0 – 1.6 L **CLINCHER® S** in tenkmengsel met 2.0 L SENCOR 480 SC plus 1.5 L GRAMOXONE of ADAMA PARAQUAT.

Moet nie 'n benattingsmiddel by hierdie behandeling voeg nie. SENCOR 480 SC moet slegs gebruik word op gronde tussen 6 – 35 % klei.

Belangrik

- Al vyf bogenoemde na-opkomsbehandelings moet toegedien word nie later as die 3-blaarstadium van die grasonkruide nie.
- Behandelinge 1, 4 en 5 wat GRAMOXONE of ADAMA PARAQUAT bevat, kan toegedien word tot die 3-blaarstadium van die gewas.
- Behandeling 2, wat slegs **CLINCHER® S** en GESAPAX 500 SC bevat, kan oorhoofs toegedien word tot die 5-blaarstadium van die gewas. Na die 5-blaarstadium moet die bespuiting tussen die suikerrietrye gerig word.
- Behandeling 3 wat MCPA of 2,4-D amien bevat, moet verkieslik as 'n gerigte bespuiting tussen die suikerrietrye toegedien word. Na die 5-blaarstadium van die gewas moet dit beslis tussen die suikerrietrye gerig word.
- Die hoeveelheid **CLINCHER® S** in al vyf bogenoemde na-opkomsbehandelings sowel as die hoeveelheid GESAPAX 500 SC in behandeling 1 moet geselekteer word volgens die voorskrifte onder "vooropkomstoediening" genoem.
- Die hoeveelheid GESAPAX 500 SC in behandeling 3 moet volgens die digtheid van die grasbesmetting en die heersende weerstoestande geselekteer word.
- Behandelings 2 en 3 mag nie altyd voldoende beheer van *P. maximum* lewer nie.
- Gebruik die hoër dosis DIURON 800 SC in behandeling 4 vir langer nawerking
- Indien die organiese materiaalinhoud van die grond 1 % oorskry, en die klei inhoud meer as 35 % is, moet 2.0 L/ha **CLINCHER® S** toegedien word.

CALLISTO, COMPLEMENT, CONCEP®, GESAPAX®, GESAPRIM®, IGRAN®, SORGOMIL®, GRAMOXONE® = Geregistreerde Handelsmerke van 'n Syngenta Groep Maatskappy.

SENCOR® = Geregistreerde Handelsmerk van Bayer SA (Edms) Beperk.

STING® = Geregistreerde Handelsmerk van Monsanto (Edms) Beperk, SA.

HAMMER® = Geregistreerde Handelsmerk van BASF.

AGIL® = Geregistreerde Handelsmerk van ADAMA Suid-Afrika (Pty.)Ltd

BREAKTHRU = Geregistreerde Handelsmerk van De Gussa.

AGRAL 90 en TRONIC = Geregistreerde Handelsmerk van PLAASKEM.

PENETREX en SOLITAIRE = Geregistreerde Handelsmerk van SAFAGRIC.