



# ACETOGAN PLUS 768 EC

Reg. No. / Reg. Nr L 8557 Act / Wet 36 of / van 1947  
N-AR 1116

An emulsifiable concentrate herbicide with added safener applied pre-emergence on annual grasses and certain broadleaf weeds as listed below in Maize, Potatoes, Sugarcane and Sweetcorn.	'n Emulsifiseerbare konsentraat onkruidodder plus beveiliger wat eenjarige grasse en sekere breëblaaronkruid soos hieronder gelys, vooropkom beheer in Aartappels, Mielies, Suikermielies en Suikerriet.
---	--

HRAC HERBICIDE GROUP CODE	K 3	HRAC ONKRUIDDODER GROEPKODE
---------------------------	-----	-----------------------------

## ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL

Acetochlor (chloroacetamide)..... 768 g / ℓ ..... Asetochloor (chloorasetamied)  
Dichlormid (safener)..... 138 g / ℓ ..... Dichlormied (beveiliger)

## NET VOLUME / NETTO VOLUME

.....

## REGISTRATION HOLDER / REGISTRASIEHOUER

Makhteshim-Agan SA (Pty) Ltd  
Co. Reg. No. / Mpy Reg. Nr 1992/001741/07  
21 Viben Street  
PO Box 498, Brackenfell 7561  
Tel: 021 982 1460 / Fax: 021 982 5810

Batch number ..... Lotnommer

Date of manufacture ..... Vervaardigingsdatum

UN No: 3082



## WARNINGS

- Handle with care.
- Harmful if swallowed.
- May be irritating to eyes, lungs and skin.
- Toxic to fish and other aquatic organisms.
- Store in a cool, dry and well-ventilated place away from direct sunlight.
- Keep in the original container, tightly closed and under lock and key.
- Store away from food, feed, seed, fertilizer and other agricultural remedies.
- Keep out of reach of children, uninformed persons and animals.
- **Re-entry:** Do not enter treated area until spray deposit has completely dried unless wearing protective clothing.
- **Aerial application:** Notify all inhabitants in the immediate 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 guarantee that it will be effective under all conditions. The activity and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the weeds 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 eat, drink or smoke while mixing or using this product.
- Wash hands thoroughly after handling.
- Avoid contact with skin and eyes.
- Avoid inhaling the spray mist.
- Wear a face shield and rubber gloves when handling this product.
- Maintain good ventilation. Respiratory protection is not required if good ventilation is maintained.
- Wash immediately after accidental skin contact with soap and water. Remove contaminated clothing and wash immediately.
- In case of eye contact, hold eyelid open and wash out with water for at least 15 minutes.
- Avoid spray drift onto other crops, grazing, rivers, dams or any other area not under treatment.
- **Triple rinse empty containers:** Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Rinse the container three times with a volume of water equal to a minimum of 10 % of that of the container. Add the rinsings to the spray tank. Perforate and flatten the container. Do not re-use for any other purpose.
- Clean the applicator thoroughly after use and dispose of wash water where it will not contaminate crops, rivers or dams.

## RESISTANCE WARNING

For resistance management **ACETOGAN PLUS** is a group code K 3 herbicide. Any weed population may contain individuals naturally resistant to **ACETOGAN PLUS** and other group code K 3 herbicides. The resistant individuals can eventually dominate the weed population if these

herbicides are used repeatedly. These resistant weeds may not be controlled by **ACETOGAN PLUS** or any group code K 3 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 group codes
- Integrate control methods (chemical, cultural and biological) into weed control programs.

For specific information contact the local distributor agent or the registration holder of this product.

## **USE RESTRICTIONS**

- Do not use **ACETOGAN PLUS** on experimental or newly released seed hybrids, or inbred parent lines without first consulting with your seed supplier or the agrochemical company concerned.
- Do not use **ACETOGAN PLUS** on poorly drained soils or soils with a compaction layer since this may lead to water logging which can result in crop injury.
- When **ACETOGAN PLUS** is tank mixed with other chemicals, the restrictions and warnings on the labels of the other chemicals must be adhered to.

## **DIRECTIONS FOR USE**

Use only as directed.

## **COMPATIBILITY**

No cases of incompatibility with other agricultural chemicals have been reported. If a tank mix is to be made with other chemicals, first mix small quantities of the chemicals in water and then add together while stirring. Check for any signs of incompatibility e.g. separation, flocculation, etc. When using in combination with other pesticides, read all the labels concerned and adhere to all the recommendations.

## **MIXING INSTRUCTIONS**

Shake the container well before use. Half fill the spray tank with clean water. Pre-mix the required volume of **ACETOGAN PLUS** separately in a small amount of water and add to the spray tank while agitating. Fill the spray tank with water to the correct volume. Ensure thorough agitation during mixing and application. Mix only sufficient spray mixture to be used on the same day. Do not allow the spray mixture to stand overnight.

## **APPLICATION**

### **1) Ground application**

**ACETOGAN PLUS** can be applied by means of any suitable medium to high volume spray apparatus provided it is equipped with an efficient agitating mechanism, it is correctly calibrated and it is able to distribute the spray mixture evenly over the target area. Flat fan nozzles that can deliver a minimum of 200 l spray mixture per ha are recommended.

**ACETOGAN PLUS** should ideally be applied just after but not later than 5 days after planting, before weed emergence. The seedbed must be fine, firm, even and without any weed growth or an excessive amount of plant rests. Continuous rain or irrigation of at least 15 mm is needed after application to leach the herbicide into the soil. If it does not rain and weeds start to germinate, a shallow surface-blending cultivation should be done to control the weeds and to incorporate the product into the top 10 – 20 mm of soil.

## 2) Aerial application

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

- Volume: A spray mixture volume of 30 l per hectare is recommended for pre-emergence and 30 to 35 l per hectare for post-emergence applications. 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: 20 to 30 droplets per cm<sup>2</sup> must be recovered pre-emergence and 30 to 45 droplet per cm<sup>2</sup> must be recovered post-emergence at the target area.
- Droplet size: A droplet spectrum with a VMD of 350 to 400 microns is recommended when applied pre-emergence and 300 to 350 microns when applied post-emergence. Limit the production of fine droplets less than 150 microns (high drift and evaporation potential) to a minimum.
- Flying height: Maintain the height of the spray boom at 3 to 4 metres above the target. Do not spray when aircraft dives, is in a climb or when banking.
- Use suitable atomising equipment that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product. The spraying system must produce a droplet spectrum with the lowest possible Relative Span.
- Position all the atomisers within the inner 60 to 75 % of the wingspan to prevent droplets from entering the wingtip vortices.
- The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8°C.
- Stop spraying if the wind speed exceeds 15 km/h.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- Spraying under temperature inversion conditions (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80 % and above) may lead to the following:
  - a) reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage).
  - b) damage to other sensitive crops and/or non-target areas through drifting of the suspended spray cloud away from the target field.
- Ensure that the Aerial Spray Operator knows exactly which fields to spray.
- Obtain an assurance from the Aerial Spray Operator that above requirements will be met and that the relevant data will be compiled in a log book for future reference.

## APPLICATION RATES

### 1) Maize and Sweetcorn

CLAY %	DOSAGE ℓ / ha	REMARKS
0 – 10 %	0.64 – 1.60 ℓ	Use the lower dosage rate if a short period of weed control is required between an application and a cultivation and/or a follow-up application. The higher rates must be used in cases of high grass pressure and/or the suppression of yellow nutsedge.
11 – 15 %	0.82 – 1.90 ℓ	
16 – 20 %	1.00 – 1.90 ℓ	
21 – 30 %	1.30 – 2.20 ℓ	
31 – 40 %	1.60 – 2.50 ℓ	
41 – 55 %	2.50 ℓ	

#### NOTE:

Low temperatures and/or heavy prolonged rains soon after planting may cause herbicide damage to the crops in the form of reduced germination, stunting, etc. These symptoms can also be aggravated if seed is planted too deep. Seed smaller than 4 flat has a higher risk of damage.

### 2) Maize (tank mixture applications)

2.1) **Broadleaf weeds and grasses** will be controlled and yellow nutsedge (*Cyperus esculentus*) will be conditionally controlled with tank mixtures of **ACETOGAN PLUS** plus ATRANEX 500 SC or ATRANEX 90 WG. Please refer to the relevant labels for full particulars and lists of weeds controlled.

CLAY %	DOSAGE ℓ / ha		
	ACETOGAN PLUS	ATRANEX 500 SC	ATRANEX 90 WG
0 – 10 %	0.64 – 1.60 ℓ	2.50 ℓ	1.4 kg
11 – 15 %	0.82 – 1.90 ℓ	3.25 ℓ	1.8 kg
16 – 20 %	1.00 – 1.90 ℓ	3.25 ℓ	1.8 kg
21 – 30 %	1.30 – 2.20 ℓ	4.00 ℓ	2.2 kg
31 – 40 %	1.60 – 2.50 ℓ	4.75 ℓ	2.6 kg
41 – 55 %	2.50 ℓ	5.00 ℓ	2.8 kg

#### NOTE:

- If conditional yellow nutsedge control is desired, use the higher application rate of **ACETOGAN PLUS**. For conditions, refer to list of weeds with variable control below.
- The higher application rate of **ACETOGAN PLUS** can also be used under conditions of high grass pressure (especially crab finger grass) in regions with high rainfall.

2.2) **Northern and Western Free State and North West Province only.** Broadleaf weeds and grasses will be controlled with a tank mixture of **ACETOGAN PLUS** plus ATRANEX 500 SC or ATRANEX 90 WG.

CLAY %	DOSAGE ℓ / ha			REMARKS
	ACETOGAN PLUS	ATRANEX 500 SC	ATRANEX 90 WG	
0 – 10 %	0.64 ℓ	2.25 ℓ	1.3 kg	Yellow nutsedge control may not be satisfactory. Thorn apple species and khaki weed may not be controlled season long.
11 – 15 %	0.82 ℓ	2.25 ℓ	1.3 kg	
16 – 20 %	1.00 ℓ	2.50 ℓ	1.1 kg	
21 – 30 %	1.30 ℓ	2.75 ℓ	1.5 kg	

**NOTE:**

- In some cases it is the preferred practice to incorporate a thiocarbamate herbicide before planting and apply tank mixtures post-emergence to the crop.
- The above-mentioned tank mixtures of **ACETOGAN PLUS** may be used in this way provided that the **ACETOGAN PLUS** is only sprayed pre-emergence to the weeds as it possesses no post-emergence herbicidal activity.
- Such applications should not be made later than the 5-leaf stage as the leaves of the maize crop may prevent the spray mixture from reaching the soil.
- Please refer to the ATRANEX 500 SC and ATRANEX 90 WG labels for full particulars and lists of the weeds controlled.

**2.3) Maize (pre-emergence).** **ACETOGAN PLUS** and SUPRANEX 600 SC or SUPRANEX 90 WG in a tank mixture can be used in cases where a wider spectrum of weed control is desired. Please refer to the relevant labels for full particulars and lists of the weeds controlled.

CLAY %	DOSAGE ℓ / ha		
	ACETOGAN PLUS	SUPRANEX 600 SC	SUPRANEX 90 WG
0 – 10 %	0.64 – 1.60 ℓ	2.0 ℓ	1.3 kg
11 – 15 %	0.82 – 1.90 ℓ	2.7 ℓ	1.8 kg
16 – 20 %	1.00 – 1.90 ℓ	2.7 ℓ	1.8 kg
21 – 30 %	1.30 – 2.20 ℓ	3.3 ℓ	2.2 kg
31 – 40 %	1.60 – 2.50 ℓ	4.0 ℓ	2.7 kg
41 – 55 %	2.50 ℓ	4.0 ℓ	2.7 kg

**3) Sugarcane**

CLAY %	DOSAGE ℓ / ha	REMARKS
1 – 35 %	2.5 ℓ	<b>ACETOGAN PLUS</b> should be tank mixed with the following broadleaf herbicides: DIUREX 800 SC: Use 3 ℓ / ha pre-emergence. ATRANEX 500 SC: Use 2 - 3 ℓ / ha pre-emergence only. Use the lower rate on soils with up to 35 % clay and the higher rate on heavier soils.
>35 %	3.7 ℓ	

**4) Potatoes**

CLAY %	DOSAGE ℓ / ha	REMARKS
0 – 10 %	0.82 ℓ	Apply under irrigation only.
11 – 20 %	1.70 ℓ	Crop injury may be caused by cold conditions following an <b>ACETOGAN PLUS</b> application.
21 – 30 %	1.90 ℓ	
> 30 %	3.60 ℓ	

## **WEEDS NORMALLY CONTROLLED**

Refer to the list of weeds below. The control of yellow nutsedge (*Cyperus esculentus*) as well as some broadleaf weeds may be variable and depends on whether climatic conditions are favourable or not. To increase the spectrum of broadleaf weeds controlled, it is recommended that tank mixes or follow-on applications of other registered broadleaf herbicides are done in combination with **ACETOGAN PLUS**.

### **LIST OF THE WEEDS CONTROLLED BY ACETOGAN PLUS**

#### **Annual Grasses**

<i>Chloris virgata</i>	feathertop Chloris
<i>Digitaria sanguinalis</i>	crab finger grass
<i>Eleusine coracana</i>	goose grass
<i>Panicum schinzii</i>	sweet buffalo grass
<i>Setaria verticillata</i>	sticky bristle grass
<i>Urochloa panicoides</i>	herringbone grass

#### **Annual Broadleaf Weeds**

<i>Amaranthus hybridus</i>	Cape pigweed
<i>Amaranthus spinosus</i>	thorny pigweed
<i>Chenopodium album</i>	white goosefoot
<i>Commelina benghalensis</i>	Bengal wandering Jew
<i>Galingsoga parviflora</i>	gallant soldier
<i>Portulaca oleracea</i>	purslane
<i>Tagetes minuta</i>	khaki weed (early germination)

#### **Control of the following weeds are variable:**

<i>Cyperus esculentus</i>	yellow nutsedge
<i>Cleome monophylla</i>	spindlepod

#### **NOTE:**

*Cyperus esculentus* control can only be achieved when planting is done into a fine, firm, even seedbed immediately following a deep mouldboard ploughing. Planting must be done straight after the seedbed preparation. Continuous rain or irrigation of at least 15 mm on lighter soils and 25 mm on heavier soils should take place after application and before the nutsedge starts to germinate and develop.

ATRANEX 500 SC (Reg. no. L5352), ATRANEX 90 WG (Reg. no. L8138), SUPRANEX 600 SC (Reg. no. L5351), SUPRANEX 90 WG (Reg. no. L8172) and DIUREX 800 SC (Reg. no. L5334) are the registered trade marks of MAKHTESHIM-AGAN LTD, Israel.

## WAARSKUWINGS

- Hanteer versigtig.
- Skadelik indien ingesluk.
- Irriterend vir oë, longe en vel.
- Giftig vir visse en ander waterorganismes.
- Stoor in 'n koel, droë en goed geventileerde plek weg van direkte sonlig.
- Bêre in die oorspronklike houer, dig toe en agter slot en grendel.
- Stoor weg van voedsel, voer, saad, kunsmis, en ander landbouchemikalieë.
- Hou buite bereik van kinders, oningeligte persone en diere.
- **Herbetreding:** Moet nie behandelde gebied binnegaan totdat die spuitneerslag droog is nie, tensy beskermende klere gedra word.
- **Lugtoediening:** Stel al die inwoners in die onmiddellike omgewing van die gebied wat bespuit gaan word in kennis en reik die nodige waarskuwings uit. Moet nie oor aangrensende gebiede of water spuit of die spuitnewel toelaat om dit te besoedel nie.

**Alhoewel 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 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 eet, drink of rook terwyl hierdie produk vermeng of hanteer word nie.
- Was hande deeglik na gebruik.
- Vermy kontak met die vel en oë.
- Vermy inaseming van die spuitmis.
- Dra 'n gesigskerm en rubberhandskoene wanneer hierdie produk hanteer word.
- Handhaaf goeie ventilasie. Asemhalingsbeskerming is nie nodig nie as goeie ventilasie beskikbaar is nie.
- Was onmiddellik na toevallige velkontak met water en seep. Trek besoedelde klere dadelik uit en was onmiddellik.
- In geval van oogkontak, spoel die oë uit met skoon lopende water vir ten minste 15 minute.
- Vermy dat die sproeinewel oor ander gewasse, weiding, riviere, damme of enige ander gebied wat nie onder behandeling is, dryf.
- **Leë houers moet driekeer uitgespoel word:** Keer die leë houer om oor die spuit of mengtenk en laat dreineer vir minstens 30 sekondes nadat die vloeitot 'n gedrup verander het. Spoel daarna die leë houer drie keer uit met 'n volume water wat minstens gelykstaande is aan 10 % van die volume van die houer. Voeg die spoelwater in die spuittenk. Vernietig die leë houer deur dit te perforeer en plat te druk. Moet die leë houer vir geen ander doel gebruik nie.
- Maak die toediener deeglik skoon na gebruik en gooi die spoelwater waar dit nie gewasse, riviere of damme sal besoedel nie.

## WEERSTANDSWAARSKUWING

Vir die bestuur van weerstand word **ACETOGAN PLUS** as 'n groepkode K 3 onkruidodder geklassifiseer. Enige onkruidpopulasie mag individue hê wat natuurlike weerstand teen **ACETOGAN PLUS** en groepkode K 3 onkruidodders besit. Die weerstandbiedende individue kan

uiteindelik die populasie domineer as hierdie onkruidodders herhaaldelik gebruik word. Hierdie weerstandbiedende onkruid mag dalk nie deur **ACETOGAN PLUS** of ander groepkode K 3 onkruidodders beheer word nie. Om onkruidweerstand te vertraag, kan die volgende gedoen word:

- Vermy die herhaaldelike eksklusiewe gebruik van onkruidodders van dieselfde onkruidoddergroepkode. Wissel af of gebruik tenkmengsels met produkte van ander onkruidoddergroepkodes.
- Integreer beheermetodes (chemiese, verbouing en biologies) in onkruidbeheerprogramme

Skakel met die verspreidersagent of die registrasiehouer vir meer spesifieke inligting.

## **GEBRUIKSBEPERKINGS**

- Moet nie **ACETOGAN PLUS** op eksperimentele, nuutvrygestelde kultivars of ingeteelde ouerplante gebruik voordat u eers met u saadverskaffer of die verskaffer van u onkruidodder gepraat het nie.
- Indien **ACETOGAN PLUS** op swak gedreineerde gronde of gronde met 'n verdigtingslaag wat tot versuip-toestande kan lei, gebruik word, mag dit tot gewasskade lei.
- Wanneer **ACETOGAN PLUS** in 'n tenkmengsel met ander produkte gebruik word, moet aan die voorwaardes en beperkings soos wat op hierdie etikette verskyn, voldoen word.

## **GEBRUIKSAANWYSINGS**

Gebruik slegs soos aangedui.

## **VERENIGBAARHEID**

Geen gevalle van onverenigbaarheid met ander landbouchemikalieë is tot dusver aangemeld nie. Indien 'n tenkmengsel met ander landbouchemiese middels gemaak word, word aanbeveel dat eers klein hoeveelhede van elke middel apart aangemaak word in 'n klein hoeveelheid water en bymekaar gevoeg word terwyl geroer word. Evalueer vir enige teken van onverenigbaarheid soos bv skeiding, flokkulering ens. As in kombinasie met ander middels gebruik word moet die etiketvoorskrifte van hierdie middels nagekom word.

## **VERMENGING**

Skud die houer deeglik voor gebruik. Vul die spuitnek halfvol met skoon water. Meng die benodigde hoeveelheid **ACETOGAN PLUS** apart met water en voeg in die tenk terwyl geroer word. Vul die tenk met water terwyl gedurig deur geroer word. Verseker deeglike roering tydens vermenging en toediening. Meng net genoeg spuitmengsel vir 'n dag se gebruik. Moet nie die spuitmengsel oornag laat staan nie.

## **TOEDIENING**

### **1) Grondtoediening**

**ACETOGAN PLUS** kan deur middel van enige geskikte medium- of hoëvolume spuitapparaat toegedien word, mits dit toegerus is met 'n doeltreffende roermeganisme, dit korrek gekalibreer is en in staat is om die spuitmengsel eweredig oor die teikengebied te versprei. Platwaaierspuitpunte wat ten minste 200 l water per ha kan lewer word aanbeveel.

**ACETOGAN PLUS** moet verkieslik net na, maar nie later as 5 dae na plant voor onkruid ontkiem, toegedien word op 'n fyn, ferm en gelyk saadbed sonder oormatige plantreste. Aanhoudende reën of besproeiing van ten minste 15 mm is nodig na toediening om die aktiewe bestanddeel in die grond in te loog tot in die onkruidontkiemingssone. As dit nie reën nie en die onkruid ontkiem, kan 'n vlak

bewerking uitgevoer word om die onkruid te beheer en die onkruidodder in die boonste 10 – 20 mm grond in te werk.

## 2) Lugtoediening

**ACETOGAN PLUS (slegs Mielies)** kan slegs deur 'n geregistreerde Lugbespuitingsoperateur met 'n korrek gekalibreerde, geregistreerde vliegtuig volgens die instruksies van SANS Kode 10118 (Aerial Application of Agricultural Pesticides) uit die lug bespuit word. Verseker dat die spuitmengsel eweredig oor die teikenarea versprei word, en die verlies aan spuitmengsel tydens toediening tot 'n minimum beperk word. Dit is daarom belangrik om aan die volgende vereistes te voldoen:

- Volume: 'n Spuitmengsel volume van 30 l per ha vooropkom en 30 tot 35 l per ha na-opkom word aanbeveel. Hierdie produk is nie teen 'n verlaagde volume getoets nie. Die registrasiehouer kan nie effektiwiteit waarborg, of verantwoordelik gehou word vir enige nadelige effekte indien hierdie produk teen 'n laer volume, as hierbo aanbeveel, toegedien word nie.
- Druppel bedekking: 20 tot 30 druppels per cm<sup>2</sup> moet op die teikenarea herwin word vir vooropkoms en 35 tot 45 druppels per cm<sup>2</sup> vir na-opkoms.
- Druppelgrootte: 'n Druppelspektrum met 'n VMD van 300 tot 400 mikrons word aanbeveel vir toediening vooropkoms en 300 tot 350 mikrons vir toediening na-opkoms. Beperk die produksie van druppels kleiner as 150 mikrons (hoë drywing en verdampingspotensiaal) tot 'n minimum.
- Vlieghoogte: Handhaaf die hoogte van die spuitbalk bo die teiken op 3 tot 4 meter. Moet nie spuit wanneer die vliegtuig duik nie, uitklim of draai nie.
- Gebruik geskikte atomiseringsapparaat wat die vereiste druppelgrootte en bedekking sal produseer, maar die minste verlies van produk verseker. Die spuitstelsel moet 'n druppelspektrum met die kleinste moontlike Relatiewe Span produseer.
- Plaas al die atomiseerders in die binnste 60 tot 75 % van die vlerkspan om te verhoed dat druppels binne-in die vlerkpuntvorteks beweeg.
- Die verskil in temperatuur tussen die nat- en droëboltermometer van 'n swaaihygrometer, moet nie 8°C oorskry nie.
- Stop bespuiting indien die windspoed 15 km/uur oorskry.
- Stop bespuiting tydens turbulente, onstabiele en droë toestande gedurende die hitte van die dag.
- Bespuiting onder temperatuur inversie toestande (deur bo of binne die inversie laag te spuit) en/of hoë lugvog toestande (relatiewe humiditeit 80 % en meer) mag tot volgende probleme aanleiding gee:
  - a) verlaagde effektiwiteit aangesien die druppels as 'n wolk in die lug bly hang en moontlik verdamp (onvoldoende bedekking op teiken).
  - b) skade aan nie-teiken gewasse of sensitiewe areas as gevolg van wegdrywing van die spuitwolk na nie-teiken area.
- Verseker dat die Lugbespuitingsoperateur presies weet watter lande bespuit moet word.
- Dit is noodsaaklik om 'n versekering van die Lugbespuitingsoperateur te verkry dat aan al die bogenoemde vereistes voldoen sal word en dat data van belang in 'n logboek saamgevat is vir toekomstige verwysing.

## TOEDIENINGSHOEVEELHEDE

### 1) Mielies en Suikermielies

KLEI %	DOSIS ℓ / ha	OPMERKINGS
0 – 10 %	0.64 – 1.60 ℓ	Gebruik die laer toedieningshoeveelheid waar 'n kort periode van onkruidbeheer benodig word tussen toediening en 'n skoffelbewerking en/of 'n opvolgbespuiting. In gevalle van hoë-grasdruk en/of geeluintjie-onderdrukking moet die hoër toedieningshoeveelhede gebruik word.
11 – 15 %	0.82 – 1.90 ℓ	
16 – 20 %	1.00 – 1.90 ℓ	
21 – 30 %	1.30 – 2.20 ℓ	
31 – 40 %	1.60 – 2.50 ℓ	
41 – 55 %	2.50 ℓ	

#### NOTA:

Die temperatuur en/of swaar aanhoudende reën direk na plant kan onkruidoderskade soos swak ontkieming, groeivertraging, ens. van die gewas tot gevolg hê. Hierdie simptome kan vererger wanneer saad te diep geplant word. Saad keiner as 4 plat het 'n hoër risiko vir beskadiging.

### 2) Mielies (tenkmengsel toedienings)

2.1) **Breëblaaronkruid** en **grasse** sal beheer word en geeluintjies (*Cyperus esculentus*) voorwaardelik beheer word met tenkmengsels van **ACETOGAN PLUS** plus **ATRANEX 500 SC** of **ATRANEX 90 WG**. Raadpleeg die toepaslike etikette vir volledige besonderhede en lyste van onkruid wat beheer word.

KLEI %	DOSIS ℓ / ha		
	ACETOGAN PLUS	ATRANEX 500 SC	ATRANEX 90 WG
0 – 10 %	0.64 – 1.60 ℓ	2.50 ℓ	1.4 kg
11 – 15 %	0.82 – 1.90 ℓ	3.25 ℓ	1.8 kg
16 – 20 %	1.00 – 1.90 ℓ	3.25 ℓ	1.8 kg
21 – 30 %	1.30 – 2.20 ℓ	4.00 ℓ	2.2 kg
31 – 40 %	1.60 – 2.50 ℓ	4.75 ℓ	2.6 kg
41 – 55 %	2.50 ℓ	5.00 ℓ	2.8 kg

#### NOTA:

- Gebruik die hoër toedieningshoeveelheid van **ACETOGAN PLUS** indien voorwaardelike geeluintjiebeheer verlang word. Verwys na die lys hieronder van onkruid wat wisselvallig beheer word en vir voorwaardes.
- Die hoër toedieningshoeveelheid van **ACETOGAN PLUS** kan ook gebruik word onder toestande van baie hoë grasdruk (veral van kruisvingergras) in gebiede met hoë reënval.

2.2) **Slegs Noord- en Wes-Vrystaat en Noordwes Provinsie.** Breëblaaronkruid en gras sal beheer word met 'n tenkmengsel van **ACETOGAN PLUS** plus **ATRANEX 500 SC** of **ATRANEX 90 WG**.

KLEI %	DOSIS ℓ / ha			OPMERKINGS
	ACETOGAN PLUS	ATRANEX 500 SC	ATRANEX 90 WG	
0 – 10 %	0.64 ℓ	2.25 ℓ	1.3 kg	Geeluintjie beheer sal nie bevredigend wees nie. Olieboom en kakiebos mag moontlik nie die hele seisoen beheer word nie.
11 – 15 %	0.82 ℓ	2.25 ℓ	1.3 kg	
16 – 20 %	1.00 ℓ	2.50 ℓ	1.1 kg	
21 – 30 %	1.30 ℓ	2.75 ℓ	1.5 kg	

**NOTA:**

- In sommige gevalle is die praktyk om voor plant eers 'n tiokarbamaat in die grond in te werk en daarna, na-opkom van die gewas, op te volg met tenkmengsels.
- Bogenoemde tenkmengsels van **ACETOGAN PLUS** kan in sulke gevalle toegedien word, maar daar moet deeglik op gelet word dat **ACETOGAN PLUS** slegs vooropkomsaktiwiteit het, en beslis nie onkruid na-opkom sal beheer nie.
- Daar word aanbeveel om nie later as die 5-blaarstadium van die mielies te spuit nie aangesien die blare van die gewas dan te veel van die spuitmengesel van die grond kan afskerm.
- Raadpleeg die ATRANEX 500 SC en ATRANEX 90 WG etikette vir volledige besonderhede en lyste van onkruid wat beheer word.

**2.3) Mielies (vooropkoms).** **ACETOGAN PLUS** en SUPRANEX 600 SC of SUPRANEX 90 WG in 'n tenkmengsel kan in gevalle gebruik word waar 'n wyer spektrum van onkruidbeheer verlang word. Raadpleeg die toepaslike etikette vir volledige besonderhede en lyste van onkruid wat beheer word.

KLEI %	DOSIS ℓ / ha		
	ACETOGAN PLUS	SUPRANEX 600 SC	SUPRANEX 90 WG
0 – 10 %	0.64 – 1.60 ℓ	2.0 ℓ	1.3 kg
11 – 15 %	0.82 – 1.90 ℓ	2.7 ℓ	1.8 kg
16 – 20 %	1.00 – 1.90 ℓ	2.7 ℓ	1.8 kg
21 – 30 %	1.30 – 2.20 ℓ	3.3 ℓ	2.2 kg
31 – 40 %	1.60 – 2.50 ℓ	4.0 ℓ	2.7 kg
41 – 55 %	2.50 ℓ	4.0 ℓ	2.7 kg

**3) Suikerriet**

KLEI %	DOSIS ℓ / ha	OPMERKINGS
1 – 35 %	2.5 ℓ	<b>ACETOGAN PLUS</b> kan met die volgende breëblaaronkruidodders in 'n tenkmengsel toegedien word: DIUREX 800 SC: Gebruik 3 ℓ / ha vooropkoms. ATRANEX 500 SC: Gebruik slegs 2 - 3 ℓ / ha vooropkoms. Gebruik die laer dosis vir gronde tot en met 35 % klei en die hoër dosis op swaarder gronde.
>35 %	3.7 ℓ	

**4) Aartappels**

KLEI %	DOSIS ℓ / ha	OPMERKINGS
0 – 10 %	0.82 ℓ	Dien slegs onder besproeiing toe.
11 – 20 %	1.70 ℓ	
21 – 30 %	1.90 ℓ	Koue toestande na 'n <b>ACETOGAN PLUS</b> toediening mag gewasskade tot gevolg hê.
> 30 %	3.60 ℓ	

## ONKRUIDE NORMAALWEG BEHEER

Verwys na die onkruidlys hieronder. Die beheer van geeluintjies (*Cyperus esculentus*) asook sekere breërblaaronkruid mag wisselvallig wees en is hoofsaaklik afhanklik van weerstoestand. Om die beheer spektrum van breërblaar onkruid te verbeter, word aanbeveel dat **ACETOGAN PLUS** in tenkmengsels of as opvolgbespuitings met geregistreerde breërblaarmiddels toegedien word.

## ONKRUIDE WAT DEUR ACETOGAN PLUS BEHEER WORD

### Eenjarige Grasse

<i>Chloris virgata</i>	witpluim Chloris
<i>Digitaria sanguinalis</i>	kruisvingergras
<i>Eleusine coracana</i>	jongosgras
<i>Panicum schinzii</i>	soetbuffelsgras
<i>Setaria verticillata</i>	klitsborselgras
<i>Urochloa panicoides</i>	beesgras

### Eenjarige Breërblaaronkruid

<i>Amaranthus hybridus</i>	Kaapse misbredie
<i>Amaranthus spinosus</i>	doringmisbredie
<i>Chenopodium album</i>	withondebossie
<i>Commelina benghalensis</i>	Bengaalse wandelende Jood
<i>Galinsoga parviflora</i>	knopkruid
<i>Portulaca oleracea</i>	porslein
<i>Tagetes minuta</i>	kakiebos (vroeg ontkiemend)

### Beheer van die volgende onkruid is wisselvallig:

<i>Cyperus esculentus</i>	geeluintjie
<i>Cleome monophylla</i>	rusperbossie

### NOTA:

Om *Cyperus esculentus* te beheer moet die plantproses voorafgegaan word deur 'n diep ploegbewerking. Die plantproses moet onmiddellik na die saadbed voorbereiding geskied. Die saadbed moet fyn, ferm, eweredig en sonder oormatige plantreste wees. Aanhoudende reën of besproeiing van tussen 15 mm vir ligter en 25 mm vir swaarder gronde moet plaasvind na toediening en voor die uintjies ontkiem en begin ontwikkel.

ATRANEX 500 SC (Reg. nr L5352), ATRANEX 90 WG (Reg. nr L8138), SUPRANEX 600 SC (Reg. nr L5351), SUPRANEX 90 WG (Reg. nr L8172) en DIUREX 800 SC (Reg. nr L5334) is die geregistreerde handelsmerke van MAKHTESHIM-AGAN LTD, Israel.