



# SULTAN<sup>®</sup> 50 SC

Reg. no. L6892 Act/Wet 36 of/van 1947  
N-AR 0912

A suspension concentrate herbicide for the pre-emergence control of annual grasses, certain broadleaf weeds and, under favourable conditions, yellow nutsedge in crops as indicated.

'n Suspensiekonsentraat vooropkomsonkruidododer vir die beheer van eenjarige grasse, sekere breëblaaronkruiden en, onder gunstige toestande, geeluintjies in gewasse soos aangedui.

**HRAC HERBICIDE GROUP CODE**                      **K3**                      **HRAC ONKRUIDDODER GROEPKODE**

## ACTIVE INGREDIENT/AKTIEWE BESTANDEEL

metazachlor (acetanilide) ..... 500 g/L ..... metazachlor (asetanilied)

## NET VOLUME/NETTO VOLUME

..... L

## REGISTRATION HOLDER/REGISTRASIEHOUER

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**SULTAN<sup>®</sup> is the registered trademark of a company of the ADAMA GROUP.**  
**SULTAN<sup>®</sup> is die geregistreerde handelsmerk van 'n maatskappy van die ADAMA GROEP.**

## CONTACT IN EMERGENCY/KONTAK IN NOOD

Griffon Poison Information Centre: +27 82 446 8946

Tygerberg Poison Information Centre: +27 21 931 6129

Batch number .....

Date of Manufacture .....

Lotnommer

Datum van Vervaardiging

UN no.: 3082



## WARNINGS

- Harmful if swallowed, inhaled or absorbed through the skin.
- Irritating to skin and may cause eye irritation.
- Toxic to fish.
- Store in a cool, dry place away from food, feed and other agricultural chemicals.
- Keep out of reach of children, uninformed persons and animals.

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

## PRECAUTIONS

- Do not eat, drink or smoke while handling this product.
- Prevent contamination of food, feed, drinking water and eating utensils.
- Wear rubber gloves and face shield when handling the concentrate. If you get it in your eyes, flush it out at once. If you get it on your skin, wash it off at once. If you spill it on your clothes, change and wash them.
- Invert the empty container over the spray tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water of at least 10 % of that of the container and add the rinsings to the content of the spray tank before destroying the empty container.
- While spraying, avoid contact with the spray as much as you can. Avoid spray drift onto other crops, grazing, rivers or dams.
- Clean applicator thoroughly after use and dispose of wash water where it will not contaminate crops, grazing, rivers or dams. Destroy empty container and do not use for any other purpose. Change and wash your work clothes. Wash yourself.

## USE RESTRICTIONS

### General

- **SULTAN® 50 SC** can damage crops on which it is registered under the following conditions:
- Application on poorly drained soils or soils with a compaction layer which may lead to water logging.
- Prolonged periods of cold, wet conditions or any other condition that put crop plants under stress.
- Inbred parent lines or newly released cultivars. Consult your supplier in case of any uncertainty.
- If **SULTAN® 50 SC** is used in tank mixtures with other products, the labels of those products should be studied carefully and all the conditions as stated on those labels should be adhered to.

**Crop-specific conditions:** **SULTAN® 50 SC** can only be used pre-emergence of weeds in broccoli, cabbage, dry beans, groundnuts, potatoes, soybeans and tobacco. In forestry and sugar-cane it can be used pre-emergence as well as early post-emergence.

### **Dry beans and soybeans**

- **SULTAN® 50 SC** must not be applied pre-emergence in dry beans and soybeans on soils with a clay percentage of less than 15 %. It can, however, be applied on dry beans as a post-emergence split application on soils with a clay percentage of more than 10 %. See directions for use for full details.
- Only disease-free seed treated with a suitable registered seed treatment product, should be planted. Soils with high levels of soil borne diseases should be avoided.

### **Tobacco**

- **SULTAN® 50 SC** must not be applied to soils with less than 15 % clay.
- Only strong, actively growing plants without any diseases should be transplanted.
- The roots of the transplants must not come into contact with **SULTAN® 50 SC** or soil treated with it. Special care should be taken that the roots of young implants do not come into contact with treated soil.
- Heavy rain after application of **SULTAN® 50 SC** in tobacco planted on gravelly soils may cause leaching of the chemical to the root zone which can lead to damage of the plants.
- An untreated strip, 100 mm on either side of the tobacco plants should be left on the ridge. A registered post-emergent graminicide can be used to control grasses on the untreated strip.

## **DIRECTIONS FOR USE**

**Use only as indicated.**

### **Compatibility**

**SULTAN® 50 SC** is compatible with products such as AMETREX® 500 SC (Reg. no L4656), ATRANEX® 500 SC (Reg. no L5352), DIUREX® 800 SC (Reg. no L5334), GALIGAN® 240 EC (Reg. no L5782), SUPRANEX 600 SC (Reg. no L5351), PARAQUAT and the parathyroid insecticides. It is advisable, however, to do a compatibility test prior to application.

### **Mixing instructions**

Shake the **SULTAN® 50 SC** container well before opening. Half fill the spray tank with water and add the required volume of **SULTAN® 50 SC** to the tank while agitating. Fill the spray tank with water. It is important that agitation is kept up during mixing and application. Prepare only sufficient spray mixture for immediate use. Do not keep spray mixture overnight.

When **SULTAN® 50 SC** is used in a tank mixture with other products as indicated in the application tables, the other product must be added first. The spray tank is then filled to almost capacity before the **SULTAN® 50 SC** is added to the spray tank.

The only exception is where **SULTAN® 50 SC** is tank mixed with GALIGAN® 240 EC where **SULTAN® 50 SC** is added to the half-filled spray tank first and the GALIGAN® 240 EC is only added when the spray tank is almost filled with water.

## APPLICATION

**SULTAN® 50 SC** can be applied by means of any suitable medium to high volume boom spray fitted with an efficient agitation system. The sprayer must be correctly calibrated to deliver at least 200 ℓ spray mixture/ha. Application should be done preferably during plant or just after plant but definitely within 5 days after the last soil cultivation. The seedbed must be free of existing weeds, fine, and firm and without excessive plant rests. Rain or irrigation of at least 10–20 mm is necessary to leach the **SULTAN® 50 SC** into the soil before the weeds start to germinate. If it does not rain and weeds start to germinate, a shallow cultivation of 10–20 mm deep can be done to destroy the existing weeds and to incorporate the **SULTAN® 50 SC** into the soil.

### Control of yellow nutsedge (*Cyperus esculentus*)

The control of yellow nutsedge can be improved by adhering to the following conditions:

- The plant process must be preceded by a deep cultivation with a mould-board plough.
- An even, fine and firm seedbed must be prepared.
- Application of the herbicide should be done within 7–10 days followed by 10–20 mm rain or irrigation before germination of yellow nutsedge, to leach the herbicide into the soil.
- Yellow nutsedge and other weeds already present at time of application will not be controlled.
- **SULTAN® 50 SC** should be applied during early spring for optimal control of yellow nutsedge.

## APPLICATION RATES

CROP	% CLAY	DOSAGE (L/ha)	REMARKS
<b>Broccoli</b>	0–10	0.8	Apply overall, preferably immediately, but not later than 5 days after transplant on a weed free seedbed. Only strong, healthy plants should be planted.
	11–20	1.0	
	21–30	1.2	
	31–40	1.6	
	> 40	2.0	
<b>Cabbage</b>	0–10	0.8	Apply overall, preferably immediately, but not later than 5 days after transplant on a weed free seedbed. Only strong, healthy plants should be planted.
	11–20	1.0	
	21–30	1.2	
	31–40	1.6	
	> 40	2.0	
<b>Dry beans</b>	0– 10	<b>Single application</b> Not recommended	It is important to note that <b>SULTAN® 50 SC</b> is not recommended on soils with a clay content of less than 15 % as a single pre-emergence application in dry beans. Apply immediately after planting before the germinating beans crack the soil. Only viable seed treated with a registered seed treatment should be used.
	11–15	Not recommended	
	16–20	0.8	
	21–30	1.0	
	31–35	1.2	
	36–40	1.2	
	> 40	1.4	

CROP	% CLAY	DOSAGE (L/ha)	REMARKS		
<b>Dry beans</b> (continued)	0–10	<b>Split application</b> Not recommended	Apply the first split application as described above. Apply the second application as a directed spray after the last cultivation and pre-emergence of weeds. It is important to note that a post-emergence application can only be done at a soil clay percentage of 11–20.		
	11–20	0 + 0.45			
	21–30	0.55 + 0.50			
	31–35	0.70 + 0.60			
	36–40	0.85 + 0.60			
	> 40	1.0 + 0.80			
<b>Groundnuts</b>	0–10	0.75	Apply directly after planting and before the groundnuts crack the soil. <b>SULTAN® 50 SC</b> must not be applied post-emergence in groundnuts. Use the higher rates on heavier soils for improved control of yellow nutsedge. Use only viable seed that was treated with a registered seed treatment.		
	11–20	1.0			
	21–30	1.2			
	31–35	1.3–1.6			
	36–40	1.4–1.6			
<b>Potatoes</b>	0–10	<b>Single application</b> 0.75	Apply immediately after plant or after ridging before any weeds have germinated. For improved control of broadleaf weeds, METRIBUZIN 480 SC formulations can be used at 1.1 L/ha in a tank mix with <b>SULTAN® 50 SC</b> . The use restrictions of METRIBUZIN should be adhered to. Use the higher rates on heavier soils for improved control of yellow nutsedge.		
	11–20	1.0			
	21–30	1.2			
	31–35	1.3–1.6			
	36–40	1.4–1.6			
	0–10	<b>Split application</b> 0.45 + 0.30			
	11–20	0.60 + 0.40			
	21–30	0.75 + 0.45			
	31–35	0.85 + 0.60			
	36–40	1.0 + 0.60			
	<b>Soybeans</b>	0– 10		Not recommended	<b>SULTAN® 50 SC</b> is not recommended on soils with a clay content of less than 15 %. Apply immediately after planting but before the soil is cracked by the soybeans. Only viable seed treated with a registered seed treatment should be planted.
		11–15		Not recommended	
16–20		0.8			
21–30		1.0			
31–40		1.2			
> 40		1.4			

CROP	% CLAY	DOSAGE (L/ha)	REMARKS
<b>Tobacco</b>	0–10	Not recommended	<b>SULTAN® 50 SC</b> is not recommended on soils with a clay content of less than 15 %. Note the conditions on tobacco as is described above under crops specific conditions. Do not apply directly over the transplants.
	11–15	Not recommended	
	16–20	1.0	
	21–30	1.2	
	31–35	1.4	
	36–40	1.6	
	> 40	1.9	

## APPLICATION RATES OF SULTAN® 50 SC IN TANK MIXES WITH OTHER PRODUCTS

### Forestry

CROP	DOSAGE ( L/ha)	REMARKS
<b>Transplanted <i>Eucalyptus</i> and Pine (<i>Pinus spp.</i>) trees.</b>	1.6 L <b>SULTAN® 50 SC</b> plus 2.0 L GALIGAN® 240 EC.	Apply preferably as a directed spray, pre-emergence or early post-emergence to transplanted <i>Eucalyptus</i> or pine trees. When <b>SULTAN® 50 SC</b> is used in a tank mix with GALIGAN® 240 EC as an early post-emergence application, the weeds must be young and actively growing. Established weeds will not be controlled. Some scorch may occur on <i>Eucalyptus</i> if the spray mixture is sprayed directly over the trees. These symptoms will disappear soon and will have no effect on the growth and development of the trees.

### Sugarcane

PLANT OR RATOON CANE	PRODUCT COMBINATIONS	% CLAY	DOSAGE (L/HA)	REMARKS
<b>Plant and ratoon cane</b> Pre-emergence of weeds	<b>SULTAN® 50 SC</b>	11–35 > 35	1.5 2.0	<b>SULTAN® 50 SC</b> or combinations thereof is not recommended on soils with a clay content of less than 10 %.
	<b>SULTAN® 50 SC + DIUREX® 800 SC</b>	11–35 > 35	1.5 + 3.0 2.0 + 3.0	For full details on DIUREX® 800 SC, consult the label.
	<b>SULTAN® 50 SC + ATRANEX® 500 SC</b>	11–35 > 35	1.5 + 2.0 2.0 + 3.0	For full details on ATRANEX® 500 SC, consult the label.

PLANT OR RATOON CANE	PRODUCT COMBINATIONS	% CLAY	DOSAGE (L/HA)	REMARKS
<b>Plant and ratoon cane</b> Early post-emergence of weeds	<b>SULTAN® 50 SC + AMETREX® 500 SC</b>	11–35 > 35	1.5 + 3.0-6.0 2.0 + 3.0-6.0	The application rate of AMERTEX® 500 SC will depend on weed size and weed pressure. Consult the AMETREX® 500 SC label for full details. To improve the post-emergence control, a suitable adjuvant should be added.
<b>Plant cane only</b> Early post-emergence of weeds	<b>SULTAN® 50 SC + AMETREX 500 SC + PARAQUAT 200 SL</b>	11–35 > 35	1.5 + 3.0-4.0 + 1.0 2.0 + 3.0-4.0 + 1.0	The application rate of AMETREX® 500 SC will depend on weed size and weed pressure. Consult the AMETREX® 500 SC and PARAQUAT labels for full details. Apply as a directed inter row application as this application can cause serious necrosis on sugar-cane. The addition of a suitable adjuvant is recommended.
	<b>SULTAN® 50 SC + DIUREX® 800 SC + PARAQUAT 200 SL</b>	11–35 > 35	1.5 + 3.0 + 1.5 2.0 + 3.0 + 1.5	Consult the DIUREX® 800 SC and PARAQUAT labels for full details.  Apply as a directed inter row application as it can cause serious necrosis on sugar-cane. The addition of a suitable adjuvant is recommended.

## WEED SPECTRUM

The following weeds are normally controlled by **SULTAN® 50 SC** at the rates as indicated in the application tables.

### Grass weeds

BOTANICAL NAME	COMMON NAME
<i>Brachiaria eruciformis</i>	Sweet signal grass
<i>Chloris virgata</i>	Feathertop Chloris
<i>Digitaria sanguinalis</i>	Crab finger-grass
<i>Digitaria ciliaris</i>	Tropical finger-grass
<i>Eleusine indica</i>	Goose grass
<i>Echinochloa crus-galli</i>	Barnyard grass
<i>Lolium temulentum</i>	Darnel
<i>Panicum maximum</i>	Common buffalo grass
<i>Panicum shinzii</i>	Sweet buffalo grass
<i>Setaria pallide-fusca</i>	Red bristle grass
<i>Setaria verticillata</i>	Stickey bristle grass
<i>Urochloa panicoides</i>	Herringbone grass

### Broadleaf weeds

BOTANICAL NAME	COMMON NAME
<i>Amaranthus deflexus</i>	Perennial pigweed
<i>Amaranthus hybridus</i>	Cape pigweed
<i>Amaranthus spinosus</i>	Thorny pigweed
<i>Chenopodium album</i>	White goosefoot
<i>Chenopodium carinatum</i>	Green goosefoot
<i>Galinsoga parviflora</i>	Gallant soldier
<i>Nicandra physaloides</i>	Apple-of-Peru
<i>Portulaca oleracea</i>	Purslane
<i>Richardia brasiliensis</i>	Tropical Richardia
<i>Solanum nigrum</i>	Deadly nightshade



The following weeds are controlled initially early in the season:

BOTANICAL NAME	COMMON NAME
<i>Acanthospermum hispidum</i>	Upright starbur
<i>Commelina benghalensis</i>	Bengal wandering Jew
<i>Tagetes minuta</i>	Khaki weed

The following weeds will only be controlled under optimum conditions:

BOTANICAL NAME	COMMON NAME
<i>Bidens pilosa</i>	Spanish black jack
<i>Cyperus esculentus</i>	Yellow nutsedge
<i>Schkuhria pinnata</i>	Dwarf marigold

**NOTE:** For the control of additional weeds where **SULTAN® 50 SC** is tank mixed with other products, please refer to the weed spectrum on the label of the specific product.

## WAARSKUWINGS

- Skadelik indien ingesluk, ingeasem of deur die vel geabsorbeer word.
- Irriterend vir die vel en mag oogirritasie veroorsaak.
- Giftig vir vise.
- Berg in 'n koel, droë plek weg van voedsel, voer en ander landbouchemikalieë.
- Hou buite bereik van kinders, oningeligte persone en diere.

**Alhoewel hierdie middel omvattend onder 'n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie aangesien die werking en effek daarvan deur faktore soos abnormale grond-, klimaats- en bergingstoestande, kwaliteit van verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui is nie, die voorkoms van weerstand van die teiken teen die betrokke middel, asook as die metode, tyd en akkuraatheid van toediening beïnvloed word. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei, die omgewing of vir nadelige effek op mens of dier of vir 'n gebrek aan prestasie van die betrokke middel as gevolg van die 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 geval van enige onsekerheid.**

## VOORSORGMAATREËLS

- Moet nie eet, drink of rook terwyl die produk hanteer word nie.
- Vermoed besoedeling van voedsel, voer, drinkwater en eetgerei.
- Dra rubberhandskoene en 'n gesigskerm wanneer die konsentraat hanteer word. Indien dit in u oë kom, spoel onmiddellik uit. Indien dit op u vel kom, was dit dadelik af. Indien dit op u klere mors, trek uit en was dit.
- Keer die leë houër om oor die spuit- of mengtenk en dreineer vir minstens 30 sekondes nadat die vloeï tot 'n gedrup verminder het. Spoel die houër daarna driekeer uit met 'n volume water gelykstaande aan 'n minimum van 10 % van die inhoud van die houër. Gooi die spoelwater by die inhoud van die spuittenk voordat die houër vernietig word.
- Vermoed kontak met die spuitstof sover as moontlik tydens toediening. Vermoed oorwaai van die spuitnewel na ander gewasse, weiding, riviere of damme.
- Maak die toediener deeglik skoon na gebruik en gooi waswater waar dit nie gewasse, weiding, riviere of damme sal besoedel nie. Vernietig leë houër en moet dit nie vir enige ander doel gebruik nie. Trek werksklere uit en was dit. Was uself.

## GEBRUIKSBEPERKINGS

### Algemeen

- **SULTAN® 50 SC** mag gewasse waarop dit geregistreer is onder die volgende toestande beskadig:
- Toediening op swak gedreineerde gronde of gronde met 'n verdigtingslaag wat tot versuipstoestande mag lei.
- Langdurige nat, koue toestande of ander toestande wat die gewas onder stremming plaas.
- Ingeteelde ouerplante of nuutvrygestelde kultivars. Raadpleeg die verskaffer in hierdie verband.
- Indien **SULTAN® 50 SC** in tenkmengsels met ander produkte gebruik word, moet hierdie produkte se etikette noukeurig bestudeer word en moet aan al die vereistes daarop voldoen word.

**Gewasspesifieke voorwaardes:** **SULTAN® 50 SC** kan slegs vooropkom van onkruid toegeleen word in aartappels, droëbone, grondbone, kopkool, sojabone, spruitkool en tabak. Dit kan ook vooropkom en vroeg na-opkom toegeleen word in suikerriet en bosbou.

### **Droë- en sojabone**

- **SULTAN® 50 SC** moet nie op gronde met minder as 15 % klei as 'n vooropkom enkel toediening in droë- en sojabone toegeleen word nie. As 'n splittoediening kan dit gebruik word as 'n na-opkom toediening in droëbone op gronde met meer as 10 % klei soos wat onder gebruiksaanwysings aangedui is.
- Siektevrye saad wat met 'n geskikte geregistreerde saadbehandelingsmiddel behandel is, moet geplant word. Landerye met 'n hoë voorkoms van grondgedraagde siektes moet vermy word.

### **Tabak**

- **SULTAN® 50 SC** moet nie op gronde met minder as 15 % klei toegeleen word nie.
- Plant slegs sterk, aktiefgroeiende plantjies sonder enige siektes uit.
- Verseker dat die wortels van die uitgeplante tabakplantjies nie met die **SULTAN® 50 SC** of grond wat daarmee behandel, is in aanraking kom nie. Spesiale sorg moet gedra word dat die wortels van plantjies wat ingeboet word, nie met grond wat alreeds met **SULTAN® 50 SC** behandel is in aanraking kom nie.
- Swaar reën na toediening in tabak wat in gruiserige grond geplant is, kan daartoe lei dat **SULTAN® 50 SC** in die wortelsone geloog word en gewasskade mag veroorsaak.
- 'n Onbehandelde strook ongeveer 100 mm weerskante van die plantry moet op die rif gelaat word. Grasbeheer op die strook kan verkry word deur met 'n geregistreerde na-opkom grasdoder te behandel.

## **GEBRUIKSAANWYSINGS**

**Gebruik slegs soos aangedui.**

### **Verenigbaarheid**

**SULTAN® 50 SC** is verenigbaar met produkte soos AMETREX® 500 SC (Reg. no L4656), ATRANEX® 500 SC (Reg. no L5352), DIUREX® 800 SC (Reg. no L5334), GALIGAN® 240 EC (Reg. no L5782), SUPRANEX 600 SC (Reg. no L5351), PARAKWAT en piretroëdinsekdoders. Dit is egter altyd raadsaam om 'n fisiese verenigbaarheidstoets uit te voer voor toediening.

### **Menginstruksies**

Skud die **SULTAN® 50 SC** houër deeglik voor dit oopgemaak word. Maak die spuittenk halfvol met water en gooi die benodigde hoeveelheid **SULTAN® 50 SC** in die spuittenk terwyl geroer word. Vul die spuittenk daarna met water. Tydens vermenging en toediening moet die spuitmengsel gedurig geroer word. Maak net genoeg spuitmengsel aan om dieselfde dag uit te spuit. Moet nie die spuitmengsel oornag in die tenk laat staan nie.

In geval van tenkmengsels soos in die toedieningstabelle aangedui, moet die ander produk eers in die tenk gevoeg word waarna die tenk tot amper vol gemaak word met water voordat die **SULTAN® 50 SC** bygevoeg word.

Die enigste uitsondering is waar GALIGAN® 240 EC in 'n tenkmengsel met **SULTAN® 50 SC** gebruik word. Die **SULTAN® 50 SC** word eers in die tenk gevoeg waarna die tenk tot amper vol gemaak word met water voordat GALIGAN® 240 EC laaste bygevoeg word.

## TOEDIENING

**SULTAN® 50 SC** kan met enige geskikte medium- of hoëvolume balkspuit toegerus met 'n doeltreffende roermeganisme, toegedien word. Die spuitapparaat moet korrek gekalibreer wees om ten minste 200 L spuitmengsel/ha te kan lewer. Toediening moet verkieslik met plant of direk daarna maar definitief binne 5 dae na die laaste grondbewerking geskied. Die saadbed moet onkruidvry, fyn en ferm sonder oormatige plantreste wees. Reën of besproeiing van ten minste 10–20 mm is nodig om die **SULTAN® 50 SC** in die grond te loog voordat die onkruid begin ontkiem. Indien dit nie reën nie en onkruid begin ontkiem, kan 'n ligte grondbewerking van 10–20 mm diep uitgevoer word om die onkruid te vernietig en die middel in die grond in te werk.

### Beheer van geeluintjies (*Cyperus esculentus*)

**Die beheer van geeluintjies kan verbeter word deur aan die volgende voorwaardes te voldoen:**

- Die plantproses moet voorafgegaan word deur 'n diep ploegbewerking met 'n rysterplaatploeg.
- 'n Fyn, egalige, ferm saadbed moet voorberei word.
- Die onkruidodertoediening moet binne 7–10 dae gevolg word deur 10–20 mm deurdringende reën of besproeiing om die onkruidodder in die grond in te loog voordat geeluintjies begin om te ontkiem.
- Geeluintjies en ander onkruid wat alreeds teenwoordig is tydens toediening, sal nie beheer word nie.
- Optimale beheer van geeluintjies word in die vroeë lente verkry.

### TOEDIENINGSHOEVEELHEDE VAN SULTAN® 50 SC

GEWAS	KLEI %	DOSIS (L/HA)	OPMERKINGS	
Aartappels		<b>Enkeltoediening</b>	Dien toe direk na plant of operd voor enige onkruid ontkiem het. Vir verbeterde beheer van breëblaaronkruid kan metribuzin 480 SC formulasies teen 1.1 L/ha in 'n tenkmengsel met <b>SULTAN® 50 SC</b> gebruik word. Die gebruiksbepelings van METRIBUZIN moet nagekom word. Gebruik die hoër toedieningshoeveelheid op swaarder grond vir verbeterde geeluintjie-beheer.	
	0-10	0.75		
	11-20	1.0		
	21-30	1.2		
	31-35	1.3-1.6		
	36-40	1.4-1.6		
			<b>Splittoediening</b>	Die eerste toediening word vooropkom toegedien soos beskryf by die enkeltoediening. Die tweede toediening word gedoen na die laaste operdbewerking vooropkom van onkruid en moet verkieslik as 'n gerigte bespuiting gedoen word om afskerming van die spuitmengsel deur die aartappelloof te verhoed.
	0– 10	0.45 + 0.30		
	11–20	0.60 + 0.40		
	21–30	0.75 + 0.45		
	31–35	0.85 + 0.60		
	36-40	1.0 + 0.60		

GEWAS	KLEI %	DOSIS (L/HA)	OPMERKINGS
<b>Droëbone</b>	0–10	<b>Enkeltoediening</b> Nie aanbeveel nie	Dit is belangrik om daarop te let dat <b>SULTAN® 50 SC</b> nie op gronde met minder as 15 % klei as 'n enkel vooropkom toediening in droëbone aanbeveel word nie. Toediening moet geskied direk na plant en voordat die ontkiemende droëbone die grond kraak. Plant net kiemkrachtige saad wat met 'n geregistreerde saadbehandelingsmiddel behandel is.  Die eerste toediening by die splittoediening moet plaasvind soos by enkeltoediening beskryf. Die tweede toediening moet as 'n gerigte bespuiting na die laaste skoffelbewerking en vooropkom van onkruid toegedien word. Dit is belangrik om daarop te let dat 'n na-opkom toediening slegs by kleipersentasies 11–20 kan geskied.
	11–15	Nie aanbeveel nie	
	16–20	0.8	
	21–30	1.0	
	31–35	1.2	
	36–40	1.2	
	> 40	1.4	
	0–10	<b>Splittoediening</b> Nie aanbeveel nie	
	11–20	0 + 0.45	
	21–30	0.55 + 0.50	
	31–35	0.70 + 0.60	
	36–40	0.85 + 0.60	
	> 40	1.0 + 0.80	
	<b>Grondbone</b>	0–10	
11–20		1.0	
21–30		1.2	
31–35		1.3–1.6	
36–40		1.4–1.6	
<b>Kopkool</b>	0–10	0.8	Dien as 'n algehele toediening, verkieslik direk, maar nie later as 5 dae, na uitplant op 'n onkruidvrye saadbed toe. Verseker dat slegs sterk, gesonde plantjies gebruik word.
	11–20	1.0	
	21–30	1.2	
	31–40	1.6	
	> 40	2.0	
<b>Sojabone</b>	0–10	Nie aanbeveel nie	Dit is belangrik om daarop te let dat <b>SULTAN® 50 SC</b> nie op gronde met minder as 15 % klei in sojabone aanbeveel word nie. Toediening moet geskied direk na plant en voor die ontkiemende sojabone die grond begin kraak. Plant net kiemkrachtige saad wat met 'n geregistreerde saadbehandelingsmiddel behandel is.
	11–15	Nie aanbeveel nie	
	16–20	0.8	
	21–30	1.0	
	31–40	1.2	
	> 40	1.4	

GEWAS	KLEI %	DOSIS (L/HA)	OPMERKINGS
<b>Spruitkool</b> (Broccoli)	0–10	0.8	Dien as 'n algehele toediening, verkieslik direk, maar nie later as 5 dae na uitplant, op 'n onkruidvrye saadbed toe. Verseker dat slegs sterk, gesonde plantjies gebruik word.
	11–20	1.0	
	21–30	1.2	
	31–40	1.6	
	> 40	2.0	
<b>Tabak</b>	0–10	Nie aanbeveel nie	Dit is belangrik om daarop te let dat <b>SULTAN® 50 SC</b> nie op gronde met minder as 15 % klei in tabak aanbeveel word nie. Let ook op na die voorwaardes vir tabak onder Gewasspesifieke Voorwaardes soos hierbo vermeld. Moet nie direk oor die uitgeplante tabakplantjies toedien nie.
	11–15	Nie aanbeveel nie	
	16–20	1.0	
	21–30	1.2	
	31–35	1.4	
	36–40	1.6	
	> 40	1.9	

#### TOEDIENINGSHOEVEELHEDE VAN SULTAN® 50 SC IN TENKMENGSELS MET ANDER PRODUKTE.

##### Bosbou

GEWAS	DOSIS (L/HA)	OPMERKINGS
<b>Uitgeplante <i>Eucalyptus</i>- en denneboompies (<i>Pinus spp.</i>)</b>	1.6 L <b>SULTAN® 50 SC</b> plus 2.0 L <b>GALIGAN® 240 EC</b>	Dien toe, verkieslik as 'n gerigte bespuiting, vooropkom of vroeg na-opkom in uitgeplante <i>Eucalyptus</i> of denneboompies. Indien toediening vroeg na-opkom geskied, moet die onkruid jonk en aktiefgroeiend wees. Gevestigde onkruid sal nie beheer word nie. 'n Mate van skroei mag voorkom wanneer die tenkmengsel oor <i>Eucalyptus</i> -boompies gespuit word. Hierdie simptome sal egter spoedig verdwyn en het geen invloed op die groei en ontwikkeling van die boompies nie.

## Suikerriet

PLANT- OF OORSTAANRIET	PRODUK-KOMBINASIE	KLEI %	DOSIS (L/HA)	OPMERKINGS
Plant- en oorstaanriet Vooropkom van onkruid	<b>SULTAN® 50 SC</b>	11–35 > 35	1.5 2.0	<b>SULTAN® 50 SC</b> of kombinasies daarvan moet nie op gronde met minder as 10 % klei gebruik word nie.
	<b>SULTAN® 50 SC</b> + <b>DIUREX® 800 SC</b>	11–35 > 35	1.5 + 3.0 2.0 + 3.0	Vir volle besonderhede oor <b>DIUREX® 800 SC</b> , raadpleeg die etiket
	<b>SULTAN® 50 SC</b> + <b>ATRANEX® 500 SC</b>	11–35 > 35	1.5 + 2.0 2.0 + 3.0	Vir volle besonderhede oor <b>ATRANEX® 500 SC</b> , raadpleeg die etiket.
Plant- en oorstaanriet Vroeg na-opkom van onkruid	<b>SULTAN® 50 SC</b> + <b>AMETREX® 500 SC</b>	11–35 > 35	1.5 + 3.0–6.0 2.0 + 3.0–6.0	Die toedieningshoeveelheid van <b>AMETREX® 500 SC</b> sal afhang van onkruidgrootte en onkruiddruk. Raadpleeg die <b>AMETREX® 500 SC</b> etiket vir volle besonderhede. 'n Geskikte bevorderingsmiddel moet bygevoeg word om na-opkom werking te verbeter.
Slegs plantriet Vroeg na-opkom van onkruid	<b>SULTAN® 50 SC</b> + <b>AMETREX® 500 SC</b> + <b>PARAKWAT 200 SL</b>	11–35 > 35	1.5 + 3.0–4.0 + 1.0 2.0 + 3.0–4.0 + 1.0	Die toedieningshoeveelheid van <b>AMETREX® 500 SC</b> sal afhang van onkruidgrootte en onkruid -druk. Raadpleeg die <b>AMETREX® 500 SC</b> en parakwat etikette vir volle besonderhede. Hierdie toediening moet as 'n gerigte tussenrybespuiting geskied, aangesien hierdie kombinasie ernstige nekrose op die suikerriet kan veroorsaak. 'n Geskikte bevorderingsmiddel moet bygevoeg word.
	<b>SULTAN® 50 SC</b> + <b>DIUREX® 800 SC</b> + <b>PARAKWAT 200 SL</b>	11–35 > 35	1.5 + 3.0 + 1.5 2.0 + 3.0 + 1.5	Lees die <b>DIUREX® 800 SC</b> en parakwat etikette vir volle besonderhede. Hierdie toediening moet as 'n gerigte tussenrybespuiting geskied aangesien hierdie kombinasie ernstige nekrose op die suikerriet veroorsaak. 'n Geskikte bevorderingsmiddel moet gebruik word.

## ONKRUIDSPEKTRUM

Die volgende onkruid word normaalweg deur **SULTAN® 50 SC** beheer teen die toedieningshoeveelhede soos aangedui in die toedieningstabelle.

### Grasonkruid

BOTANIESE NAAM	GEWONE NAAM
<i>Brachiaria eruciformis</i>	Litjiesinjaalgras
<i>Chloris virgata</i>	Witpluimchloris
<i>Digitaria sanguinalis</i>	Kruisvingergras
<i>Digitaria ciliaris</i>	Tropiese vingergras
<i>Eleusine indica</i>	Jongosgras
<i>Echinochloa crus-galli</i>	Hanepootmanna
<i>Lolium temulentum</i>	Drabok
<i>Panicum maximum</i>	Gewone buffelsgras
<i>Panicum shinzii</i>	Buffelsgras
<i>Setaria pallide-fusca</i>	Rooi borselgras
<i>Setaria verticillata</i>	Klitsborselgras
<i>Urochloa panicoides</i>	Beesgras

### Breëblaaronkruid

BOTANIESE NAAM	GEWONE NAAM
<i>Amaranthus deflexus</i>	Meerjarige misbredie
<i>Amaranthus hybridus</i>	Kaapse misbredie
<i>Amaranthus spinosus</i>	Doringmisbredie
<i>Chenopodium album</i>	Withondebossie
<i>Chenopodium carinatum</i>	Groen hondebossie
<i>Galingsoga parviflora</i>	Knopkruid
<i>Nicandra physaloides</i>	Basterappelliefie
<i>Portulaca oleracea</i>	Porslein
<i>Richardia brasiliensis</i>	Meksikaanse Richardia



BOTANIESE NAAM	GEWONE NAAM
<i>Solanum nigrum</i>	Nastergal

Die volgende onkruid word net aanvanklik vroeg in die seisoen beheer:

BOTANIESE NAAM	GEWONE NAAM
<i>Acanthospermum hispidum</i>	Regop sterklits
<i>Commelina benghalensis</i>	Bengaalse wandelende Jood
<i>Tagetes minuta</i>	Kakiebos

Die volgende onkruid word net onder optimum groeitoestande beheer:

BOTANIESE NAAM	GEWONE NAAM
<i>Bidens pilosa</i>	Knapsekêrel
<i>Cyperus esculentus</i>	Geeluintjie
<i>Schkuhria pinnata</i>	Kleinkakiebos

**NOTA:** Vir die beheer van addisionele onkruid deur **SULTAN® 50 SC** in tenkmengsels met ander produkte, word u verwys na die onkruidspektrum van die spesifieke produk soos dit op die etiket aangedui word.