Merlin®

SEE ENCLOSED PAMPHLET FOR FULL PARTICULARS

Reg. No. L6618 (Act No.36 of 1947)

A herbicide formulated as a water dispersible granule, for the control of certain broadleaf and grass weeds in sugarcane.

SIEN INGESLOTE PAMFLET VIR VOLLEDIGE BESONDERHEDE

Reg. Nr. L6618 (Wet Nr. 36 van 1947)

'n Onkruiddoder geformuleer as 'n water dispergeerbare korrel, vir die beheer van sekere breëblaar- en grasonkruide in suikerriet.

GROUP / GROEP F_2 HERBICIDE / ONKRUIDDODER

WARNING

HAZARD STATEMENTS:
Harmful if swallowed or inhaled. Suspected of damaging the unborn child. Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS:
Obtain special instruction before use. Do not breathe dust / spray. Wear protective gloves/ protective clothing/ eye protection/ face protection.

Active ingredient:
Isoxaflutole (isoxazole)....750 g/kg

Aktiewe bestanddeel:
Isoksaflutool (isoksasool)....750 g/kg

REGISTERED BY / GEREGISTREER DEUR: Bayer (Pty) Ltd / (Edms) Bpk
Reg. 1968/011192/07
P.O. Box/Posbus 143, Isando, 1600 South Africa/Suid-Afrika
TEL: (OFFICE HOURS) / (KANTOORURE) (011) 921 5911

IN CASE OF POISONING PLEASE PHONE / IN GEVAL VAN VERGIFTIGING SKAKEL: 0861 555 777

Merlin® is a registered trademark of Bayer AG.
Merlin® is 'n geregistreerde handelsmerk van Bayer AG.

© Bayer (Pty) Ltd

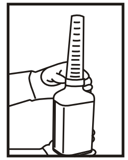
BATCH NUMBER / LOTNOMMER: See on pack
DATE OF MANUFACTURE / DATUM VERVAARDIG: Sien op houer

UN No. / VN Nr.: 3077

Bayer

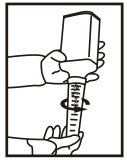
Break the seal.

Breek die seël.



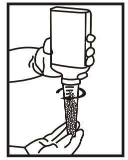
Place the measuring cylinder on the cap.

Plaas die maatsilinder op die prop.



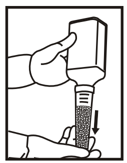
Turn the bottle over and turn the measuring cylinder anti-clockwise.

Keer bottel om, en draai die maatsilinder anti-kloksgewys.



Turn the measuring cylinder clockwise once the required volume has flowed into the measuring cylinder.

Draai maatsilinder kloksgewys sodra die gewensde hoeveelheid produk in die maatsilinder uitgeloop het.



Remove the measuring cylinder from the cap.

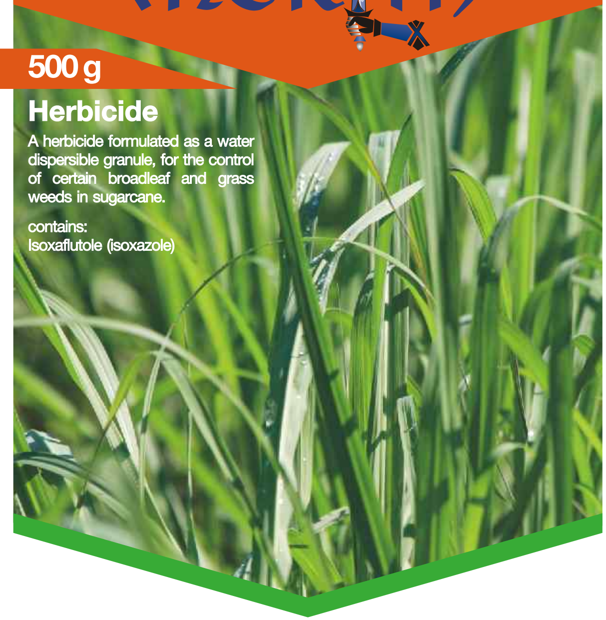
Verwyder die maatsilinder van die prop af.

Pour out the measured dose of product.

Gooi die afgemete hoeveelheid produk uit.

BAYER

Merlin®



500 g

Herbicide

A herbicide formulated as a water dispersible granule, for the control of certain broadleaf and grass weeds in sugarcane.

contains:
Isoxaflutole (isoxazole)

RSA/0923/Merlin 500g/Sales Panel
Code: ZA80259360E

WARNINGS:

HAZARD STATEMENTS:
- Harmful if swallowed or inhaled.
- Suspected of damaging the unborn child.
- Very toxic to aquatic life with long lasting effects.

Poisonous when swallowed.
Store in a cool place, away from food, feed, seed or other agricultural remedies.
Keep out of reach of children, uninformed people and animals.
Re-entry - Do not enter treated area until spray deposit has dried unless wearing protective clothing.

Although **Merlin** has been tested on most important cultivars and no significant phytotoxicity in the form of yield reduction has been recorded under normal growing conditions, this does not mean that a more sensitive cultivar might not be commercialized in the future. Where a new cultivar is encountered, large areas should not be sprayed without prior testing of **Merlin** on that cultivar.

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 WEEDS TO THE REMEDY CONCERNED AS WELL AS BY THE METHOD, TIME AND ACCURACY OF APPLICATION. THE REGISTRATION HOLDER FURTHERMORE DOES NOT ACCEPT RESPONSIBILITY FOR DAMAGE TO CROPS, VEGETATION, THE ENVIRONMENT OR HARM TO MAN OR ANIMAL OR FOR LACK OF PERFORMANCE OF THE REMEDY CONCERNED DUE TO FAILURE OF THE USER TO FOLLOW THE LABEL INSTRUCTIONS OR TO THE OCCURRENCE OF CONDITIONS WHICH COULD NOT HAVE BEEN FORESEEN IN TERMS OF THE REGISTRATION. CONSULT THE SUPPLIER IN THE EVENT OF ANY UNCERTAINTY.

PRECAUTIONS:

PRECAUTIONARY STATEMENTS:
- Obtain special instruction before use.
- Do not breathe dust / spray.
- Wear protective gloves/ protective clothing/ eye protection/ face protection.

Do not inhale spray mist.
Wash with soap and water after use or skin contact.
Do not eat, drink or smoke whilst mixing or applying or before washing hands and face and changing clothes.
Prevent spray drift onto other crops, grazing, rivers, dams or other areas not under treatment.
Prevent contamination of food, eating utensils, feed and drinking water.
Clean all equipment thoroughly after use and do not pollute the environment with wash water.
Do not apply where the roots of desirable plants might absorb the chemical.
Rinse the pre-mix container well.
Destroy the original container which contained **Merlin** by puncturing and burning it. Do not use the container for any other purpose.

RELEVANT SUBSTANCES:

Formulation components	CAS Numbers	Conc. (%)
Isoxaflutole	141112-29-0	75,00
Lignosulfonic acid, sodium salt, sulfomethylated	68512-34-5	>= 3,0 – <=10,0
Sodium diisopropylnaphthalene sulphonate	1322-93-6	>= 3,0 – <=10,0

USE RESTRICTIONS :

1. **To avoid damage to follow-up crops the following waiting period should be applied between application of Merlin and planting:**
   SUGARCANE .... NONE
   MAIZE .... 6 MONTHS
   ALL OTHER CROPS .... 12 MONTHS
   NOTE: The abovementioned waiting periods will only be valid if the correct quantity of Merlin has been applied according to the soil type and an average or above-average rainfall has occurred during and after the season in which Merlin was applied. Test planting is always recommended.
2. **Where Merlin is applied to soils which expand when wetted and crack or crumble upon drying, Merlin may remain active in the soil for much longer than the above waiting periods might indicate. Therefore Merlin must not be used on such soils if it is intended to plant isoxazole-sensitive crops in the foreseeable future.**
3. **Avoid double application, e.g., overlapping spray swaths.**
4. **Do not use on stony soil.**
5. **Do not use on plant cane.**
6. **Do not use on soils that contain less than 10 % clay.**

RESISTANCE WARNING:

Merlin is a member of the isoxazole group of herbicides. The mode of action of this group is the inhibition of the 4-HPPD enzyme and, as such it is classified by HRAC as a Group Code F_2 herbicide. Any weed population may contain individuals naturally resistant to **Merlin** and other Group Code F_2 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **Merlin** or any other Group Code F_2 herbicides.

Since the presence of resistant weeds is difficult to detect prior to herbicide application, it is of the utmost importance that treated areas be inspected at regular intervals to identify the occurrence of herbicide-resistant weeds timeously. Bayer (Pty) Ltd will not accept liability for performance failures in the event of a build-up of resistant weeds resulting from inadequate resistance management practices as indicated on the label.

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 programmes.

For specific information on resistance management contact your local Bayer CropScience representative.

<u>DIRECTIONS FOR USE:</u> USE ONLY AS DIRECTED

<u>COMPATIBILITY:</u>
Compatibility studies have been conducted with **Merlin** in combination with each <u>ONE</u> of the remedies listed below (unless otherwise specified in this label):

AS VARIATIONS MAY EXIST BETWEEN FORMULATIONS OF PRODUCTS CONTAINING THE SAME ACTIVE INGREDIENTS, THE TRADE NAMES AND REGISTRATION NUMBERS OF THE TESTED PRODUCTS ARE SHOWN. DO NOT MIX **MERLIN** WITH ANY OTHER PRODUCTS.

Merlin is compatible with **Bayer Diuron** (Reg. No. L4558), **Karmex DF** (Reg. No. L5507), **Gesapax 500 SC** (Reg. No. L2784), **Gramoxone** (L1174), and **Velpar DF** (L5432)

<u>MIXING AND APPLICATION INSTRUCTIONS :</u>
USE THE SPRAY MIXTURE WITHIN 6 HOURS AFTER MIXING

Prepare a pre-mix with the required amount of **Merlin** and a few litres of clean water in a separate container. Half fill the spray tank with water. Add the pre-mix to the tank. Add the mixing partner to the tank at this stage and then top up with water. Keep the chemical in continuous suspension by means of agitation. After each day's spraying flush the tank out thoroughly with water. For optimum results spray as soon as possible after mixing. Accurately calibrate spray equipment prior to application. Use fan type nozzles to ensure a uniform coverage. Apply onto a clod-free surface. If, after application, dry weather conditions should prevail, deep germinating weeds may germinate and develop. Under these conditions the appropriate post-emergence herbicide should be used. Use 100-400 ℓ water per ha for overall application.

<u>APPLICATION TABLE:</u>

CROP	SOIL CLAY PERCENTAGE	APPLICATION RATE PER HECTARE	REMARKS
SUGARCANE Ratoon cane only **(Dryland and irrigated)**	10 - 24%	100 - 150 g **Merlin*** plus either 2,0 ℓ **Bayer Diuron** or 2,0 kg **Karmex DF** or 3,0-4,0 ℓ **Gesapax 500 SC**	<u>For broadleaf and grass weed control in light textured soils.</u> Apply pre- emergence of the weeds, at spiking, but no later than the 4-leaf stage of the cane.

CROP	SOIL CLAY PERCENTAGE	APPLICATION RATE PER HECTARE	REMARKS
SUGARCANE Ratoon cane only **(Dryland and irrigated)**	25 - 36 %	150 - 200 g **Merlin*** plus either 2,0 - 2,5 ℓ **Bayer Diuron** or 2,0 - 2,5 kg **Karmex DF** or 3,0 - 4,0 ℓ **Gesapax 500 SC**	<u>For broadleaf and grass weed control in medium textured soils.</u> Apply pre-emergence of the weeds, at spiking, but no later than the 4-leaf stage of the cane.
	Above 36 %	200 - 250 g **Merlin*** plus either 2,0 - 2,5 ℓ **Bayer Diuron** or 2,0 - 2,5 kg **Karmex DF** or 3,0 - 4,0 ℓ **Gesapax 500 SC**	<u>For broadleaf and grass weed control in heavy textured soils.</u> Apply pre-emergence of the weeds, at spiking, but no later than the 4-leaf stage of the cane.

*** Use the higher dosage rate on heavier soils in the soil clay percentage category and/or where greater weed pressure is anticipated.**

Merlin can be applied as a tank mixture with Gramoxone (L1174) or Velpar DF (L5432) under dryland conditions. Consult the Gramoxone and Velpar labels for full particulars.

<u>BROADLEAF WEEDS CONTROLLED:</u>

Ageratum conyzoides	billy goat weed
Amaranthus deflexus	perennial pigweed (from seed)
A. hybridus	common pigweed
A. spinosus	spiny pigweed
A. thunbergii	red pigweed

BROADLEAF WEEDS CONTROLLED:

	Apium leptophyllum	wild celery
	Bidens pilosa	common blackjack
	Chenopodium album	white goosefoot
	C. carinatum	green goosefoot
	Conyza bonariensis	horseweed
	C. sumatrensis (albida)	tall fleabane
*	*Datura ferox*	large thorn apple
*	*D. stramonium*	thorn apple
	Euphorbia hirta	red milkweed
*	*Flaveria bidentis*	smelter's bush
	Gnaphalium luteo-album	jersey cudweed
	G. pennsylvanicum	Gnaphalium
	Hibiscus trionum	bladder weed
	Hypochoeris radicata	hairy wild lettuce
*	*Parthenium hysterophorus*	bastard feverfew
	Portulaca oleracea	purslane
	Richardia brasiliensis	tropical Richardia
	Schkuhria pinnata	dwarf marigold
*	*Senecio madagascariensis*	ragwort
	Sesamum triphyllum	wild sesame
	Sida cordifolia	heartleaf Sida
	Solanum nigrum	nightshade
	Tagetes minuta	khaki weed

GRASS WEEDS CONTROLLED:

	Chloris virgata	feather top chloris
	Digitaria sanguinalis	crab finger-grass
	D. ternata	black seed finger-grass
	Eleusine indica	goose grass
	Panicum maximum	common buffalo grass
	Panicum schinzii	sweet buffalo grass
*	*Paspalum dilatatum*	common Paspalum
*	*Urochloa mosambicensis*	bushveld herringbone grass

* Later flushes of these weeds may not be adequately controlled.

NOTE: **Merlin** controls the above mentioned weed species in the tank mixes as indicated. Other weed species that were not present during the development trials with the product, may also be controlled to a certain degree. The registration holder does not accept any responsibility for unlisted weeds.

NOTES:

1. Tank mixes standing for long periods of time could result either in chlorosis of the sugarcane (if sprayed onto the foliage) or in reduced residual efficacy, or both.
2. Tank mixes of **Merlin** and **Gesapax 500 SC** could result in increased chlorosis. These symptoms are of a transitory nature and yield will not be affected significantly.
3. Application of the higher recommended rates could induce marginal chlorosis, which is transient in nature and should not affect yield.
4. Sugarcane under any form of stress is more likely to display marginal chlorosis after **Merlin** applications. The greater and more sustained the stress factor, the longer the plant will take to grow out of the symptoms.
5. The use of **Merlin** on newly limed soil could cause crop chlorosis.
6. If **Merlin** is mixed with water containing high levels of chlorine, its efficacy may be reduced.
7. Do not add any adjuvants to the spray mixture.

BAYER (PTY) LTD ACKNOWLEDGES THE FOLLOWING:

The trade mark **Gesapax®** is the property of a Syngenta Group Company.
The trade mark **Gramoxone®** is the property of a Syngenta Group Company.
The trade mark **Karmex®** is the property of DuPont de Nemours International Societe Anonyme
The trade mark **Velpar®** is the property of DuPont de Nemours International Societe Anonyme

© Bayer (Pty) Ltd. All unauthorized reproduction of this label is forbidden.

Bayer

WAARSKUWINGS:

GEVAARVERKLARINGS:
- Skadelik indien ingesluk of ingeasem.
- Vermoede dat dit die ongebore kind beskadig.
- Baie giftig vir waterlewende organismes met langdurige gevolge.

Giftig indien ingesluk.
Berg in 'n koel plek, weg van voedsel, voer, saad of enige ander landboumiddels.
Hou buite bereik van kinders, oningeligte persone en diere.
Herbetreding - Moenie behandelde gebied binnegaan alvorens die spuitneerslag droog is nie, tensy beskermende oorklere gedra word.

Alhoewel **Merlin** op die meeste belangrike kultivars getoets is, met geen betekenisvolle simptome van fitotoksisiteit in die vorm van oesverlagings, onder normale groeitoestande nie, beteken dit nie dat 'n meer vatbare kultivar nie in die toekoms gekommersialiseer kan word nie. Waar 'n nuwe kultivar teëgekom word, moet groot areas nie behandel word voordat **Merlin** op daardie kultivar getoets is 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 AANGESIEN DIE WERKING EN EFFEK DAARVAN BEïNVLOED KAN WORD DEUR FAKTORE SOOS ABNORMALE GROND-, KLIMAATS- EN BERGINGSTOESTANDE, KWALITEIT VAN VERDUNNINGSWATER, VERENIGBAARHEID MET ANDER STOWWE WAT NIE OP DIE ETIKET AANGEDUI IS NIE EN DIE VOORKOMS VAN WEERSTAND VAN DIE ONKRUIDE TEEN DIE BETROKKE MIDDEL SOWEL AS DIE METODE, TYD EN AKKURAATHEID VAN TOEDIENING. 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 DIE TOESTANDE WAT NIE KRAGTENS DIE REGISTRASIE VOORSIEN KON WORD NIE. RAADPLEEG DIE VERSKAFFER IN DIE GEVAL VAN ENIGE ONSEKERHEID.

VOORSORGMAATREËLS:

VOORSORGSVERKLARINGS:
- Kry spesiale instruksies voor gebruik.
- Moet nie poeier / spuitstof inasem nie.
- Dra beskermende handskoene/beskermende klere/oogbeskerming/gesigbeskerming.

Moenie die sproeinewel inasem nie.
Was met seep en water na gebruik of velkontak.
Moenie eet, drink of rook tydens vermenging of toediening of voordat hande en gesig gewas en skoon klere aangetrek is nie.
Verhoed wegdrywing van die sproeinewel na ander gewasse, weidings, riviere, damme of ander gebiede wat nie behandel word nie.
Verhoed besoedeling van voedsel, eetgerei, voer en drinkwater.
Maak alle apparaat deeglik skoon na gebruik en moenie die omgewing met spoelwater besoedel nie.
Moenie toedien waar die wortels van gewensde plante die middel mag opneem nie.
Spoel die voorafmeng-houer deeglik uit.
Vernietig die oorspronklike houer wat **Merlin** bevat het deur gate daarin te maak en te verbrand. Moenie die houer vir enige ander doel gebruik nie.

RELEVANTE STOWWE:

Formulation components	CAS Numbers	Conc. (%)
Isoxaflutole	141112-29-0	75,00
Lignosulfonic acid, sodium salt, sulfomethylated	68512-34-5	>= 3,0 – <=10,0
Sodium diisopropylnaphthalene sulphonate	1322-93-6	>= 3,0 – <=10,0

GEBRUIKSBEPERKINGS:

1. **Om skade aan opvolggewasse te voorkom moet die volgende wagperiodes gehandhaaf word tussen Merlin toediening en plant:**
   SUIKERRIET .... GEEN
   MIELIES .... 6 MAANDE
   ALLE ANDER GEWASSE .... 12 MAANDE
   NOTA: Bogenoemde wagperiodes geld slegs indien die korrekte hoeveelheid Merlin volgens grondsoort toegedien was en normale- of bo-gemiddelde reënval gedurende die seisoen, waarin Merlin toegedien is en daarna, voorgekom het. Toetsaanplanting word altyd aanbeveel.
2. **Waar Merlin toegedien is op gronde wat uitsit tydens natwording en kraak of krummel tydens uitdroging soos bv. turfgronde, mag die Merlin veel langer aktief bly in die grond as wat deur bostaande wagperiodes aangedui word. Gevolglik moet Merlin nie op sodanige grond toegedien word indien daar beoog word om isoksasool-gevoelige gewasse in die voorsienbare toekoms daarop te plant nie.**
3. **Vermy dubbelbespuitings, bv., oorvleueling van spuitbane.**
4. **Moenie op klipperige grond gebruik nie.**
5. **Moenie op plantriet gebruik nie.**
6. **Moenie gebruik op grond wat minder as 10 % klei bevat nie.**

WEERSTANDSWAARSKUWING:

Merlin behoort aan die isoksasool-groep van onkruiddoders. Die metode van werking van hierdie groep is die inhibering van die 4-HPPD ensiem en as sulks word dit deur HRAC as 'n Groepkode F_2 onkruiddoder geklassifiseer. Enige populasie van 'n spesifieke onkruid mag individue insluit wat 'n natuurlike weerstand teen **Merlin**, of enige ander Groepkode F_2 onkruiddoder het. Indien hierdie onkruiddoders herhaaldelik aangewend word, kan die weerstandbiedende individue uiteindelik die onkruidpopulasie oorheers. Hierdie weerstandbiedende onkruide sal moontlik nie deur **Merlin** of enige ander Groepkode F_2 onkruiddoder, beheer word nie.

Aangesien die voorkoms van weerstandbiedende onkruide moeilik is om te bepaal voor onkruiddodertoediening plaasvind, is dit uiters noodsaaklik dat behandelde gebiede met gereelde intervalle ondersoek word om weerstand vroegtydig te identifiseer. Bayer (Edms) Bpk. sal nie verantwoordelikheid aanvaar vir enige gebrek aan prestasie in die geval van die opbou van weerstand in die onkruidpopulasie as gevolg van onvoldoende onkruidbestandheidsbestuur soos aangedui op die etiket nie.

Om weerstand teen onkruiddoders te vertraag:
- Vermy die eksklusiewe, herhaaldelike gebruik van onkruiddoders in dieselfde onkruiddodergroepkode. Wissel af met, of gebruik tenkmengsels van produkte in verskillende onkruiddodergroepkodes.
- Integreer ander beheermaatreëls (chemies, verbouing, biologies) in onkruidbeheerprogramme.

Vir spesifieke inligting oor weerstandsbestuur, kontak u naaste Bayer CropScience verteenwoordiger.

<u>GEBRUIKSAANWYSINGS:</u> GEBRUIK SLEGS SOOS AANGEDUI

<u>VERENIGBAARHEID:</u>
Verenigbaarheidstudies is gedoen met **Merlin** in kombinasie met elk van <u>EEN</u> van die middels hieronder gelys (tensy anders aangedui op hierdie etiket):

AANGESIEN VARIASIES MAG VOORKOM TUSSEN FORMULASIES VAN PRODUKTE WAT DIESELFDE AKTIEWE BESTANDDELE BEVAT, WORD DIE HANDELSNAME EN REGISTRASIENOMMERS VAN DIE GETOETSTE PRODUKTE HIERBY AANGEDUI. MOENIE **MERLIN** MET ENIGE ANDER PRODUKTE VERMENG NIE.

Merlin is verenigbaar met **Bayer Diuron** (Reg. Nr. L4558), **Karmex DF** (Reg. Nr. L5507), **Gesapax 500 SC** (Reg. Nr. L2784), **Gramoxone** (L1174) en **Velpar DF** (L5432).

<u>MENG- EN TOEDIENINGSINSTRUKSIES</u>:
GEBRUIK DIE SPUITMENGSEL BINNE 6 UUR NA VERMENGING

Maak 'n mengsel vooraf met die aanbevole hoeveelheid **Merlin** en 'n paar liter skoon water in 'n aparte houer. Maak die spuittenk halfvol met water. Voeg die voorafgemengde mengsel by die spuittenk. Voeg dan die ander aanbevole onkruiddoder by en vul die tenk verder met water. Hou die middel in die spuittenk voortdurend in suspensie deur roering. Aan die einde van die dag se bespuiting moet die spuittenk deeglik met water uitgespoel word. Vir optimale resultate moet toediening so gou moontlik na vermenging plaasvind. Kalibreer spuittoerusting noukeurig voor toediening. Gebruik waaiertipe spuitpunte om 'n eweredige bedekking te verseker. Dien toe op die grondoppervlak wat vry is van kluite. Indien droë weersomstandighede na toediening heers, mag diep ontkiemende onkruid ontkiem en ontwikkel. Onder hierdie toestande moet 'n geskikte na-opkom onkruiddoder gebruik word. Vir algehele toediening gebruik 100-400 ℓ water per ha.

<u>TOEDIENINGSTABEL:</u>

GEWAS	GROND KLEI PERSENTASIE	TOEDIENINGSHOEVEELHEID	OPMERKINGS
SUIKERRIET Slegs oorstaanriet **(Droeland en besproeing)**	10- 24%	100 - 150 g **Merlin** * plus óf 2,0 ℓ **Bayer Diuron** óf 2,0 kg **Karmex DF** óf 3,0-4,0 ℓ **Gesapax 500 SC**	<u>Vir breëblaar- en grasonkruidbeheer in ligte tekstuur gronde.</u> Dien voor-opkom van die onkruide toe, wanneer die riet opkom ("spiking"), maar nie later as die 4-blaarstadium van die suikerriet nie.
SUIKERRIET Slegs oorstaanriet **(Droeland en besproeing)**	25-36 %	150 - 200 g **Merlin** * plus óf 2,0 - 2,5 ℓ **Bayer Diuron** óf 2,0 - 2,5 kg **Karmex DF** óf 3,0 - 4,0 ℓ **Gesapax 500 SC**	<u>Vir breëblaar- en grasonkruidbeheer in medium tekstuur gronde.</u> Dien voor-opkom van die onkruide toe, wanneer die riet opkom ("spiking"), maar nie later as die 4-blaarstadium van die suikerriet nie.
	Bo 36 %	200 - 250 g **Merlin** * plus óf 2,0 - 2,5 ℓ **Bayer Diuron** óf 2,0 - 2,5 kg **Karmex DF** óf 3,0 - 4,0 ℓ **Gesapax 500 SC**	<u>Vir breëblaar- en grasonkruidbeheer in swaar tekstuur gronde.</u> Dien voor-opkom van die onkruide toe, wanneer die riet opkom ("spiking"), maar nie later as die 4-blaarstadium van die suikerriet nie.

*** Gebruik die hoër toedieningshoeveelheid op swaarder gronde in die kleipersentasie kategorie en/of waar groter onkruiddruk verwag word.**

Merlin kan toegedien word in 'n tenkmengsel met Gramoxone (L1174) of Velpar DF (L5432) onder droëland toestande. Verwys na die Gramoxone n Velpar etikette vir volledige aanwysings.

<u>BREËBLAARONKRUIDE BEHEER:</u>

Ageratum conyzoides	indringer-Ageratum
Amaranthus deflexus	meerjarige misbredie (wat van saad groei)
A. hybridus	gewone misbredie
A.spinosus	doringmisbredie
A. thunbergii	rooimisbredie
Apium leptophyllum	wildeseldery

BREËBLAARONKRUIDE BEHEER:

	Bidens pilosa	knapsekêrel
	Chenopodium album	withondebossie
	C. carinatum	groenhondebossie
	Conyza bonariensis	kleinskraalhans
	C. sumatrensis (albida)	vaalskraalhans
*	*Datura ferox*	grootstinkblaar
*	*D. stramonium*	stinkblaar
	Euphorbia hirta	rooimelkkruid
*	*Flaveria bidentis*	smeltersbossie
	Gnaphalium luteo-album	roerkruid
	Gnaphalium pennsylvanicum	Gnaphalium
	Hibiscus trionum	terblansbossie
	Hypochoeris radicata	harige skaapslaai
*	*Parthenium hysterophorus*	Demoinabossie
	Portulaca oleracea	porslein
	Richardia brasiliensis	tropiese Richardia
	Schkuhria pinnata kleinkakiebos	
*	*Senecio madagascariensis*	gifbossie
	Sesamum tryphyllum	wildesesam
	Sida cordifolia	hartblaartaaiman
	Solanum nigrum	nastergal
	Tagetes minuta	kakiebos

GRASONKRUIDE BEHEER:

	Chloris virgata	witpluim-Chloris
	Digitaria sanguinalis	kruisvingergras
	D. ternata	swartsaadvingergras
	Eleusine indica	jongosgras
	Panicum maximum	gewone buffelsgras
	Panicum schinzii	soet buffelsgras
*	*Paspalum dilatatum*	gewone Paspalum
*	*Urochloa mosambicensis*	bosveldbeesgras

* Laat stuwings van hierdie onkruide sal nie voldoende beheer word nie.

NOTA: Merlin beheer die bogenoemde onkruidspesies in die tenkmengsels soos aangedui. Ander onkruidspesies wat nie tydens die ontwikkelingsproewe met die middel voorgekom het nie, kan moontlik in 'n meerdere of mindere mate beheer word. Die registrasiehouer aanvaar egter geen aanspreeklikheid ten opsigte van ongelyste onkruide nie.

NOTAS:

1. Tenkmengsels wat vir lang periodes staan mag of vergeling van die suikerriet (indien op die blare gespuit) of verkorte residuele effektiwiteit, of beide, veroorsaak.
2. Tenkmengsels van **Merlin** en **Gesapax 500 SC** mag verhoogde mate van vergeling veroorsaak. Hierdie simptome is egter tydelik van aard en opbrengs sal nie noemenswaardig beïnvloed word nie.
3. Die hoër aanbevole toedieningshoeveelhede mag vergeling tot gevolg hê van die blaarrandte, wat van verbygaande aard is en behoort nie die opbrengs nadelig te beïnvloed nie
4. Suikerriet wat onder enige vorm van stremming is sal meer geneig wees om vergeling van die blaarrandte te wys na **Merlin** toedienings. Hoe groter en langduriger die faktor wat die stremming veroorsaak, hoe langer sal die plant neem om die simptome te ontgroei.
5. Die gebruik van **Merlin** op pas bekalkte grond kan 'n hoë mate van gewasvergeling veroorsaak.
6. Indien **Merlin** met water vermeng word wat hoë vlakke van chloor bevat, kan die middel se effektiwiteit verminder word.
7. Moenie bevorderingsmiddels by die spuitmengsel voeg nie.

BAYER (EDMS) BPK. ERKEN DIE VOLGENDE:

Die handelsmerk **Gesapax®** is die eiendom van 'n Syngenta Groep Maatskappy.
Die handelsmerk **Gramoxone®** is die eiendom van 'n Syngenta Groep Maatskappy.
Die handelsmerk **Karmex®** is die eiendom van DuPont de Nemours International Societe Anonyme
Die handelsmerk **Velpar®** is die eiendom van DuPont de Nemours International Societe Anonyme

© Bayer (Edms) Bpk. Alle ongemagtigde reproduksie van hierdie etiket word verbied.

Bayer