



Bullet®

Onkruiddoder deur
Herbicide by **Monsanto**

NOODTELEFOON / EMERGENCY TELEPHONE

(011) 790 8200 (Kantoor-ure/Office hrs)

09.1.314.694 4000

(24 uur internasionaal/24 hr international)

MONSANTO



Reg. No. L5623 Wet 36/1947

'n Suspensie-konstraat onkruiddoder vir voor- en vroeë na-opkomsbeheer van eenjarige onkruid in mielies.

Reg. No. L5623 Act 36/1947

A suspension concentrate herbicide for pre- and early post emerge control of annual weeds in maize.

Aktiewe bestanddele

Asetochlor
(chloorasetanilied HRAC GP K3) 250 g/ℓ
Atrasien
(triasien HRAC GP C1) 225 g/ℓ
Terbutulasien
(triasien HRAC GP C1) 225 g/ℓ

Active ingredients

Acetochlor
(chloroacetanilide HRAC GP K3) 250 g/ℓ
Atrazine
(triazine HRAC GP C1) 225 g/ℓ
Terbuthylazine
(triazine HRAC GP C1) 225 g/ℓ

Geregistreeer, vervaardig & versprei deur:

Monsanto Suid-Afrika (Edms) Bpk
Reg. No. 1968/001485/07
Posbus 69933
BRYANSTON
2021

Registered, manufactured & distributed by:

Monsanto South Africa (Pty) Ltd.
Reg. No. 1968/001485/07
P.O. Box 69933
BRYANSTON
2021

Datum van vervaardiging

Date of Manufacture

UN NUMBER 3082

Lot Nr.

Batch No.



SKADELIK - HARMFULL



WAARSKUWINGS



WARNINGS

- Giftig indien ingesluk word.
 - Bewaar die middel weg van voedsel, voer, saad, kunsmis en ander landboumiddels.
 - Hou buite bereik van kinders, oningeligte persone en diere.
 - Alhoewel hierdie onkruidodder omvattend en onder 'n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie aangesien die werking en effektiwiteit daarvan beïnvloed kan word deur faktore soos abnormale grond-, klimaat- en bergingstoestande, kwaliteit van verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui is 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 die verantwoordelikheid vir skade aan gewasse, plantegroei, die omgewing, of vir nadelige effek op mens of dier, of vir die gebrek aan prestasie van die
- Poisonous if swallowed.
 - Store away from food, feeds, seed, fertilizer and other agricultural chemicals.
 - Keep out of reach of children, ununiformed persons and animals.
 - Although this herbicide has been extensively tested under a large variety of soil and climatic 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 against the remedy concerned, as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal, or for lack of performance of the her-

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. Onder abnormale koue en nat klimaatstoestande met plant of kort daarna, kan gewasskade voorkom.

bicide 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. Crop damage can occur under abnormally cold and wet conditions at planting or shortly thereafter.

VOORSORGMATREËLS



PRECAUTIONS

- Moenie spuitmis of spuitnewel inasem nie.
- Dra rubberhandskoene gedurende hantering van die konsentraat.
- Indien die middel met die vel of oë in aanraking kom, was dadelik met baie water en in die geval van oë kry mediese behandeling indien nodig.
- Moenie eet, drink of rook tydens gebruik of daarna, alvorens deeglik gewas en skoon kleres aangetrek is nie.
- Voorkom wegdrywing en/of besoedeling van enige gewasse, weiding, riviere,

- Do not breathe in fumes or spray mist.
- Wear rubber gloves when handling concentrate.
- In case of contact with skin or eyes, wash immediately with plenty of water and in the case of eyes, get medical attention if necessary.
- Do not smoke, eat or drink while or after using before washing and change of clothing.
- Prevent drift and/or contamination onto any crops, grazing, rivers, dams or any other

damme en enige ander gebiede wat nie behandel word nie.

- Moenie drinkwater, eetgerei, voedsel, voer, saad, kunsmis en enige ander landbouchemikalieë besoedel nie.
- Spoel die leë houers driekeer uit met 'n volume water gelykstaande aan 'n minimum van 10% van die houer. Gooi die spoelwater by die inhoud van die spuittenk. Vernietig die houer daarna deur dit vol gate te steek.
- Moenie leë houer vir enige ander doel gebruik nie.
- Moenie meng en laai nader as minstens 15 m weg vanaf boorgate, strome, riviere en damme nie.
- Moet nie nader as 60 m van damme toedien nie.
- Verseker dat geen terugsyfering na boorgate of damme plaasvind wanneer die produk deur 'n besproeiingstelsel toegedien word nie.

areas not under treatment.

- Prevent contamination of drinking water, eating utensils, food, feedstuff, seed, fertilizers and other agricultural chemicals.
- Rinse empty containers three times with a volume of water equal to a minimum of 10% of that of the container. Add the rinsings to the contents of the spray tank before destroying the container by perforation.
- Do not re-use empty container for any other purpose.
- Do not mix and load within at least 15 m from boreholes, streams and rivers.
- Do not apply within at least 60 m from dams.
- Ensure that no back-siphoning to boreholes or dams takes place when product is applied through the irrigation system.

**GEBRUIK ALLEENLIK SOOS AANGEDUI**

Algemene inligting

- Moenie BULLET op saadmielies of ingeteelde oerplante van mieliebasters of op eksperimentele of nuut vrygestelde kultivars gebruik alvorens die vervaardiger en die saadverspreider geraadpleeg is nie.
- Vloedbesproeiing mag lei tot verminderde onkruidbeheer.
- Optimale onkruidbeheer word verkry op 'n fyn, gelyk saadbed wat vry van kluite, onkruid en plantreste is. BULLET sal ook onkruide beheer waar verminderde of deklaagbewerking toegepas word.
- Alvorens BULLET met ander middels gemeng word moet die etiket van die betrokke middel gelees en enige beperkings en aanbevelings nagekom word. 'n Fisiese mengbaarheidstoets behoort voor elke bespuiting gedoen te word.

USE ONLY AS DIRECTED

General information

- Do NOT apply BULLET to seed-maize or inbred parent plants of maize hybrids, nor onto experimental or newly released cultivars without referring to the manufacturer and seed supplier before application.
- Flood irrigation can reduce weed control performance.
- Optimum weed control is obtained on a fine even seedbed, free of weeds, trash and clods. However, BULLET will give weed control in stubble mulch or minimum tillage conditions.
- Before using BULLET in combination with other herbicides, read the labels and adhere to label recommendations and restrictions. A physical compatibility test should always be carried out prior to application.

Gebbruiksbeperkings

Om skade aan opvolggewasse (deur triasien-onkruidodders) te voorkom, moet die volgende wagperiodes nagekom word:

Mielies en suikerriet:	Geen
Graansorghum:	12 maande
Aartappels, droëbone, grondbone, kleingraan, sojabone, sonneblom en voersorghum:	18 maande
Alle ander gewasse ('n toetsaanplanting word aanbeveel):	24 maande

L.W.: Bogenoemde wagperiodes geld slegs indien die aanbevole dosisse volgens grondtipe toegedien is, gevolg deur 'n normale of bogemiddelde reënval na toediening.

- Toediening op gronde wat uitsit by natwording en kraak of krummel by uitdroging, mag tot gevolg hê dat die triasien veel langer aktief bly in die grond wat gevolglik dié wagperiodes verleng. Vooropkomsbehandeling op sulke gronde mag ook swak onkruidbeheer tot gevolg hê.

Restrictions of use

To prevent damage to follow-up crops the following waiting periods must be heeded:

Maize and sugarcane:	None
Grainsorghum:	12 months
Potatoes, dry beans, groundnuts, small grain, soybeans, sunflower and fodder sorghum:	18 months

All other crops (a test planting is recommen- ded): 24 months

N.B.: The above mentioned waiting periods are valid only if the correct dosage rate according to soil type was applied and normal or above average rainfall occurred after application.

- When applied on soils which expand on wetting and crack or crumble on drying out the triazine will remain active in the soil much longer, resulting in longer waiting periods. Poor weed control may also be experienced when applied pre-emergence.

MENGINSTRUKSIES



MIXING INSTRUCTIONS

- Wanneer BULLET met ander onkruidodders vermeng of in programbespuiting gebruik word, moet die etikette van alle betrokke produkte sorgvuldig gelees en die vervaardiger se aanbevelings nagekom word.
 - Skud die houër deeglik voor gebruik. Maak dit toe na gebruik.
 - Indien BULLET met enige ander geregistreerde onkruidodder vermeng word, moet die volgende prosedure kronologies gevolg word:
 - a) Maak die spuitenk driekwart vol met skoon water en voeg die verlangde hoeveelheid BULLET deur 'n 50 maas sif by, terwyl daar gedurig geroer word.
 - b) Maak die spuitenk nou amper vol met water en voeg die verlangde volume ander onkruidodder, bv. GUARDIAN S EC, by as tenkmengsel. Vul nou die res van die tenk met water.
 - c) Verseker dat die mengsel gedurende vullings en tydens bespuiting deurgaans geroer
- When mixing BULLET with other herbicides or using in a program spray, read the labels of all the involved products and adhere to the manufacturer's recommendations.
 - Shake container well before use. Close container securely after use.
 - When mixing BULLET with other registered herbicides, use the following procedures chronologically:
 - a) Fill spray tank three quarters with clean water. Add the required amount BULLET to the water through a 50 mesh sieve while stirring.
 - b) Continue filling the spray tank with water and add the required amount of the other herbicide, e.g. GUARDIAN S EC, as a tank mix just before the tank is filled to its full level.
 - c) Ensure thorough agitation of the mixture in the tank during mixture and spraying. When using

word. Wanneer 'n rugsakspuit gebruik word, moet dit deeglik geskud word voor bespuiting.

d) Tenkmengsels moet deeglik uitgespuit word en nie oornag in die spuittenk gelaat word nie.

e) Spuittoerusting moet deeglik na toediening uitgespoel word.

a knapsack spray, shake it thoroughly before spraying.

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

e) Thoroughly flush out spraying equipment at the end of the spraying operation.

TOEDIENINGSINLICHTING



APPLICATION INFORMATION

- Sorg dat die toedieningsapparaat korrek gekalibreer is en gereeld nagegaan word voor en tydens toediening.
- 10 - 15 mm reën binne 7 - 10 dae na toediening is nodig vir goeie onkruidbeheer.
- Vir optimale onkruidbeheer moet die saadbed binne 3 dae voor plant voorberei word. Dien BULLET onmiddellik of binne 3 dae na plant toe. 10 -15 mm reën of besproeiing is binne 3 dae na toediening nodig om die onkruiddoder in die ontkiemingsone van die onkruidsaad in te was.

- Ensure spray equipment is accurately calibrated and regularly checked before and during the spraying operation.
- 10 - 15 mm rain within 7 to 10 days after application is necessary for good weed control.
- For optimum weed control, seedbed preparation should take place within 3 days before planting. Followed immediately by the BULLET application. 10-15 mm rain or irrigation within 3 days to wash the herbicide into the zone of germinating weeds, will ensure optimum weed control.

- Onder droë toestande mag onkruidsaailinge opkom, maar hulle is gewoonlik verpot en kan vernietig word met 'n vlak bewerking wat terselfertyd die onkruidoder met die boonste 10-20 mm grondlaag vermeng, of dit kan vernietig word met 'n bespuiting met 'n geregistreerde naopkomsonkruidoder.
- Enige bewerking na toediening mag onkruidbeheer benadeel veral as onbehandelde grond na die oppervlak gebring word.
- Indien korsvorming 'n probleem word, moet 'n roltandeg in dieselfde rigting as die plantrye gebruik word om die ontkieming van die mielies te bevorder.
- Sorg dat voldoende kunsmis met plant naby die saad geplaas word om kragtige saailinggroei te bevorder. Dit is veral van belang waar vroeg geplant word terwyl die grondtemperatuur relatief laag is, gepaardgaande met 'n aaneenlopende vogtige klimaat.
- Gebruik 100 - 300 ℓ /ha van die spuitmengsel vir algehele grondtoediening.

- Under dry conditions, weed seedlings may emerge. These are usually stunted and can be controlled with either a shallow cultivation, which also mixes the herbicide with the top 10 - 20 mm of soil, or with a recommended post emerge herbicide treatment.
- Any cultivation after application may reduce weed control especially if untreated soil is brought to the surface.
- If soil crusting becomes a problem apply a rotary harrow in the same direction the rows are planted, to assist maize germination.
- Ensure that sufficient fertilizer is placed near the seed at planting, to promote vigorous seedling growth. This is especially important at early planting when the soil temperature is relatively low accompanied by continuous moist conditions.
- Use 100 - 300 ℓ /ha total spray volume for overall ground application.

- Toedieningshoeveelhedes en spuitvolumes moet vir strookbehandelings dienooreenkomstig aangepas word.

Voor opkoms

- BULLET of tenkmengsels daarvan moet verkieslik met plant, of onmiddellik na plant by mielies toegedien word. Moenie later as drie dae na die laaste grondbewerking en drie dae na plant toedien nie.

Na-opkoms

- Indien toegedien word as 'n na-opkomsbehandeling moet die breëblaaronkruid kleiner as die 4-blaarstadium wees. Indien grasse voorkom en die breëblaaronkruid groter as die 4-blaarstadium is, of grasse voorkom, moet die onkruid eers met 'n skoffelbewerking vernietig word voor bespuiting.

- Dosage rates and spray volumes should be adjusted accordingly for on the row band treatments.

Pre-emergence

- Apply BULLET or tank mixtures thereof in maize at planting or immediately after planting. Do not apply later than three days after last cultivation and planting.

Post emergence

- For early post emergence application broadleaf weeds must not be larger than the 4-leaf stage. If broadleaf weeds have developed beyond the 4-leaf stage or grasses are present, the weeds must first be destroyed by a cultivation before the application.



MIELIES	MAIZE
Tabel 1	Table 1
Die beheer van sekere breëblaar-onkruid en eenjarige grasse waar Kruisvingergras (<i>Digitaria sanguinalis</i>) 'n probleem is.	The control of certain broadleaf weeds and annual grasses where Crab finger grass (<i>Digitaria sanguinalis</i>) is a problem.
Klei % Clay	BULLET €/ha
0 - 10	1.8 - 2.25
11 - 15	2.25 - 2.75
16 - 20	2.75 - 3.5
21 - 30	3.5 - 4.25
31 - 40	4.25 - 5.0
>40	Nie aanbeveel nie / Not recommended
<p>Gebruik die hoër dosis vir hoë besmettings van:</p> <ul style="list-style-type: none"> • <i>Datura ferox</i> (Grootstinkblaar) • <i>Datura stramonium</i> (Gewone stinkblaar) • <i>Digitaria sanguinalis</i> (Kruisvingergras) • <i>Tagetes minuta</i> (Langkakiëbos) • En ligte besmettings van <i>Cyperus esculentus</i> (Geeluintjie) 	<p>Use the higher dosage rate for high infestations of:</p> <ul style="list-style-type: none"> • <i>Datura ferox</i> (Large thorn apple) • <i>Datura stramonium</i> (Common thorn apple) • <i>Digitaria sanguinalis</i> (Crab finger grass) • <i>Tagetes minuta</i> (Tall khakiweed) • And light infestations of <i>Cyperus esculentus</i> (Yellow nutsedge)



Tabel 2		Table 2	
Die beheer van eenjarige grasse, sekere breëblaaronkruiden en Geeluintjies (<i>Cyperus esculentus</i>)		The control of annual grasses, certain broadleaf weeds and Yellow nutsedge (<i>Cyperus esculentus</i>)	
Klei % Clay	BULLET μ ha + Guardian S EC μ ha		
0 - 10	2.25	0.8	
11 - 15	2.75	0.8	
16 - 20	3.5	0.8	
21 - 30	4.25	0.8	
31 - 40	5.0	0.8	
>40	Nie Aanbeveel nie/Not recommended	Nie Aanbeveel nie/Not recommended	
ONKRUID WAT DEUR BULLET BEHEER WORD WEEDS CONTROLLED BY BULLET			
Grasse		Grasse	
Litjiessinjalgras	<i>Brachiaria eruciformis</i>	Sweet signal grass	
Witpluimchloris	<i>Chloris virgata</i>	Feathertop chloris	
Kruisvingergras	<i>Digitaria sanguinalis</i>	Crab finger grass	
Jongosgras	<i>Eleusine indica</i>	Goose grass	
Biesie	<i>Fimbristylis spp.</i> ³	Slender biesie	
Gewone buffelsgras	<i>Panicum maximum</i> ³	Common buffalo grass	
Soetbuffelsgras	<i>Panicum schinzii</i> ³	Sweet buffalo grass	
Rooiborselsaadgras	<i>Setaria pallide-fusca</i>	Garden bristle grass	
Klitsborselgras	<i>Setaria verticillata</i> ³	Sticky bristle grass	
Kleinwortelsaadgras	<i>Tragus berteronianus</i> ³	Small carrotseed grass	
Grootwortelsaadgras	<i>Tragus racemosus</i> ³	Large carrotseed grass	

**ONKRUID WAT DEUR BULLET BEHEER WORD (vervolg)
WEEDS CONTROLLED BY BULLET (continued)**

Tuingras Bosveld beesgras Beesgras	<i>Urochloa brachyura</i> ³ <i>Urochloa mosambicensis</i> ³ <i>Urochloa panicoides</i>	Garden grass Bushveld herringbone grass Herringbone grass
Aangesien BULLET eenjarige grasse beheer, kan ander eenjarige grasse wat nie gelys is nie, ook tot 'n mindere of meerdere mate beheer word. Die registrasiehouer aanvaar egter geen aanspreeklikheid t.o.v. ongelyste onkruid nie.		Since BULLET controls annual grasses, other annual grasses that are not listed may be controlled to a greater or lesser degree. The registration holder does not accept any liability in respect of the control of unlisted weeds.
Breëblaaronkruid Agtsadige kruipsterklits Vyfsadige kruipsterklits Regopsterklits Meerjarige misbredie Gewone misbredie Doringmisbredie Rooimisbredie Spaanse knapsekêrel Kosmos Knapsekêrel Withondebossie Groenhondebossie Rusperbosse Mooinoentjie Bengaalse wandelende jood Melie crotalaria	<i>Acanthospermum australe</i> <i>Acanthospermum glabratum</i> <i>Acanthospermum hispidum</i> <i>Amaranthus deflexus</i> <i>Amaranthus hybridus</i> <i>Amaranthus spinosus</i> <i>Amaranthus thunbergii</i> <i>Bidens bipinnata</i> <i>Bidens Formosa</i> ¹ <i>Bidens pilosa</i> <i>Chenopodium album</i> <i>Chenopodium carinatum</i> <i>Cleome monophylla</i> <i>Cleome rubella</i> <i>Commelina benghalensis</i> ¹ <i>Crotalaria sphaerocarpa</i>	Broadleaf weeds Eight seeded prostrate starbur Five seeded prostrate starbur Upright starbur Perennial pigweed Common pigweed Thorny pigweed Red pigweed Spanish blackjack Cosmos Blackjack White goosefoot Green goosefoot Spindlepod Pretty lady Bengal wandering jew Melie crotalaria

**ONKRUID WAT DEUR BULLET BEHEER WORD (vervolg)
WEEDS CONTROLLED BY BULLET (continued)**

Wildekomkommer	<i>Cucumis myriocarpus</i> ²	Striped wild cucumber
Geeluintjie	<i>Cyperus esculentis</i> ⁴	Yellow nutsedge
Stinkblaar (alleenlik vroeg ontkiemend)	<i>Datura spp</i> ¹	Thorn apple (early germinating only)
Knopkruid	<i>Galinsoga parviflora</i>	Gallant soldier
Gisekia	<i>Gisekia pharnaceoides</i>	Gisekia
Wildestokroos	<i>Hibiscus cannabinus</i> ¹	Kenaf
Terblansbossie	<i>Hibiscus trionum</i>	Bladder weed
Purperwinde	<i>Ipomoea purpurea</i> ²	Common morning glory
Basterappelliefie	<i>Nicandra physaloides</i>	Apple of Peru
Wilde-appelliefie	<i>Physalis angulata</i>	Wild gooseberry
Porselein	<i>Portulaca oleracea</i>	Purslane
Tropiese richardia	<i>Richardia brasiliensis</i>	Tropical richardia
Kleinkakiebos	<i>Schkuhria pinnata</i>	Dwarf marigold
Sydissel	<i>Sonchus oleraceus</i>	Sowthistle
Kakiebos	<i>Tagetes minuta</i>	Khakiweed
Dubbeltjie	<i>Tribulus terrestris</i> ²	Dubbeltjie
Kankerroos	<i>Xanthium strumarium</i> ²	Cocklebur

Nota:

- 1) Onkruid wat deur die hoër dosis in die reeks beheer word.
- 2) Addisionele onkruid wat deur na-opkomstoediening.
- 3) Grasse wat beheer word met die toevoeging van GUARDIAN S EC soos aangedui op die etiket.
- 4) Wisselvallige beheer.

Note:

- 1) Weeds controlled with the higher rates in the given range.
- 2) Additional weeds controlled by post emergence application.
- 3) Grasses controlled with the addition of GUARDIAN S EC as indicated on the label.
- 4) Controlled variably.

ONKRUID WAT DEUR BULLET BEHEER WORD (vervolg)
WEEDS CONTROLLED BY BULLET (continued)

Die beheer van *Cyperus esculentus* is afhanklik van die volgende:

- Waar die dosiskeuse aangebied word, moet die hoër dosis gebruik word.
- 'n Diepbewerking moet die plantproses voorafgaan.
- Sien toedieningshoeveelhede vir meer besonderhede (p11,12).

The control of *Cyperus esculentus* is dependent on the following:

- Where a dosage choice is given, the higher rate should be used.
- Planting must be proceeded by a deep ploughing.
- See application rates for more detail (p11,12).

Die volgende handelsmerke en registrasies onder Wet 36 van 1947 word erken:		The following trademarks and registrations under Act 36 of 1947 are acknowledged:	
Produk Product	Reg. No.	Registrasiehouer	Registration holder
GUARDIAN S EC	L 4862	Monsanto Suid-Afrika (Edms)Bpk	Monsanto South Africa (Pty) Ltd

Monsanto is 'n lid van AVCASA.

Monsanto is a member of AVCASA.

Oktober 2002

October 2002

MONSANTO

