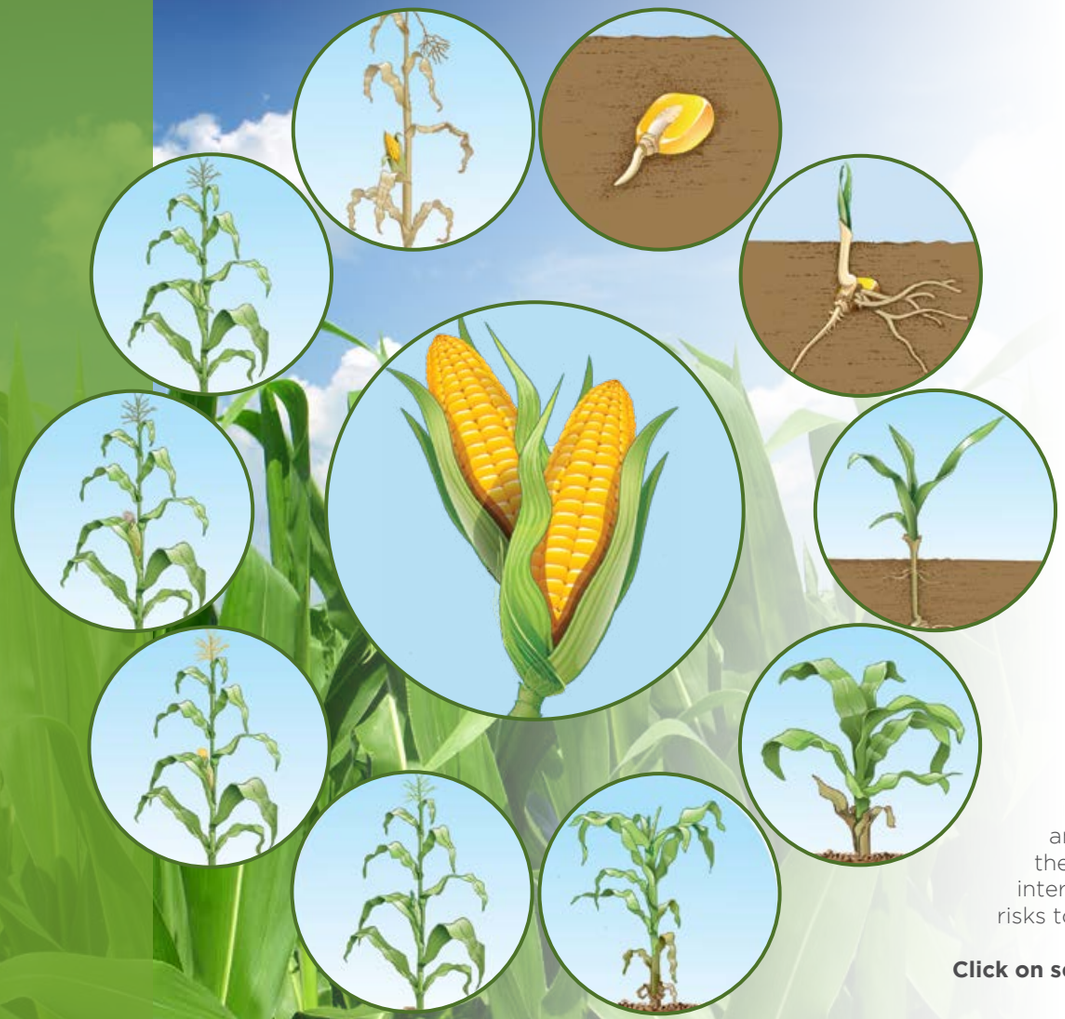
WinField® United

Maize Crop Manual

villa



WinField® United

Maize Crop Manual

Our comprehensive portfolio of Maize products is provided in a quick reference guide. The aim is to communicate a summary positioning in crop phenological stage (timing of application), features of the product, do's and don'ts, and use rates in an easy one-page format.

Note that crop protection advisors and farmers must always comply with the recommendations on the official label according to the Act (Act 36 of 1947).

Integrated crop management is the most important and sustainable approach to designing and managing crop protection systems. It is a careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimise risks to human health and the environment.

Click on section links on the right to go through relevant sections.

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MAIZE GROWTH STAGE SPRAY PROGRAMME

INSECTICIDE

HERBICIDE

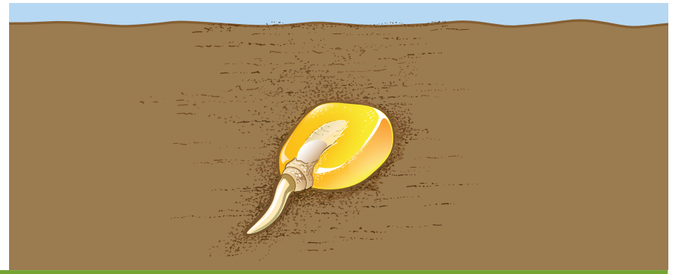
FUNGICIDE

ADJUVANT

PLANT GROWTH REGULATOR

TANK CLEANER

Maize Growth Stage Spray Programme



	PROBLEM	Growth Stage 0 Pre planting	Growth stage 1 Planting
PRE PLANT	WINTER AND EARLY SUMMER WEEDS AS WELL AS VOLUNTEER MAIZE	SLASH PLUS 540 SL / PANGA PLUS 540 SL, SLASH 710 SG / GLYGRAN 710 SG, BOUND 200 SL	
	NUTSEDGE AND GRASSES	EPTC PLUS EC + / CANTRON 480 SC + LEAP 840 EC	
	SOIL INSECTS	CHLORPYRIFOS 480 EC	
	VOLUNTEER MAIZE (Including glyphosate tolerant volunteer maize)	SERIES 240 EC / BOUND 200 SL	
	SEED DRESSING SOIL INSECTS	RONSEK 600 FS, SORENTO 600 FS	
PRE EMERGANCE	NUTSEDGE AND GRASSES		PALLADIUM PLUS 915 EC, METOLACHLOR 915 EC /PLATINUM PLUS 915 EC or LEAP 840 EC
	BROAD-LEAF WEEDS		CANTRON 480 SC/ GRANTRON 750 WDG +/or TERBUSIEN SUPER 600 SC +/or TERBUWEED 600 WDG +/or AGRAZINE 500 SC +/or FLUMETSULAM 800 WDG +/or TERBUCIDE PLUS 900 WDG + /or CORVETTE 425 SC
	GRASS AND BROAD-LEAF WEEDS		BRENNO 700 SC or TETRAMET 600 SC
	NEMATODES AND SOIL INSECTS		COUNTER FC 15 G / CARBOTERR 100 GR (COUNTER FC 15 G, followed by PLATOON 310 SL 6 weeks later)
	CUT WORM		CUT WORM BAIT or LAMBDA 50 EC /JUDO 50 EC or LAMBDA SECURE 106 CS /JUDO SECURE 106 CS

NEXT PAGE

** Please note that programme is adjusted*
** This programme does not necessarily represent all the products available and must be adjusted to season accordingly.*
** Always read the label before use.*

WINFIELD® UNITED

Maize Growth Stage Spray Programme

	PROBLEM	Growth stage 2 VE - V1	Growth stage 3 V3-V5	Growth stage 4 V6-V8	Growth stage 5 V9-V12	Growth stage 6 V13-V16	Growth stage 7 VT - R1	Growth stage 8 R2-R3	Growth stage 9 R4-R6
POST EMERGANCE	GREY LEAF SPOT, NORTHERN LEAF BLIGHT AND LEAF RUST			MYCOBLOCK 250 SC or INDICATE 250 SC or ARIA 188 SC or SANTANA 480 SC +ACADEMY 250 SC	MYCOBLOCK 250 SC +/OR D-ZOLE 250 EC INDICATE 250 SC FOLLOWED BY SPARTA 375 SC ARIA 188 SC +/OR ACADEMY 250 SC +/OR SANTANA 480 SC				
	MAIZE STALK BORER / SORGHUM STEM BORER		ARENA EC or LINEAR 350 EC or CHLORPYRIFOS 480 EC or LAMBDA 50 EC or LAMBDA SECURE 106 CS or JUDOX 148 SC or ADDITION 150 EC + LAMBDA 50 EC, METHOMYL 90 SP						
	AFRICAN BOLLWORM				LAMBDA 50 EC or LAMBDA SECURE 106 CS or ADDITION 150 EC + LAMBDA 50 EC, METHOMYL 90 SP, ALPHATHRIN 100 SC, DELTA-THRIN. POLYTRIN, RAMBA				
	TWO-SPOTTED SPIDER MITE		RAMBA 100 EC						
	WEEDS ALREADY EMERGED, MAKE APPLICATION BEFORE 8TH LEAF STAGE OF GLYPHOSATE TOLERANT MAIZE MAIZE	SLASH PLUS 540 SL or PANGA 540 SL or GLYGRAN 710 SG or SLASH 710 SG							
	WEEDS ALREADY EMERGED PLUS RESIDUAL ACTION ON GRASSES AND BROAD LEAF WEEDS		CANTRON 480 SC + ACETOCHLOR 900 EC or METOLACHLOR 960 EC or PALLADIUM 960 EC + TERBUSIEN SUPER 600 SC or TERBUWEED 600 WDG or TERBUCIDE PLUS 900 WDG						
	YELLOW NUTSEDGE & GRASSES		CANTRON 480 SC/GRANTRON 750 WDG* + ACETOCHLOR 900 EC or METOLACHLOR 960 EC						
			HALO 750 WDG, HORNET 480 SL,						
	BROAD-LEAF WEEDS		2,4 D AMINE SOLUBLE and FLUMETSULAM 800 WDG, CAMPATOP 225 EC, CORVETTE 425 SC, LOTUS 480 SL						
	DIFFICULT GRASSES TO CONTROL LIKE *(Sorghum spp.)*		NICOSULFURON 750 WDG						
	PURPLE & YELLOW NUTSEDGE		HALO 750 WDG						

** Please note that programme is adjusted*
** This programme does not necessarily represent all the products available and must be adjusted to season accordingly.*
** Always read the label before use.*

WINFIELD® UNITED

INSECTICIDE

Click on product links above to get to more information on this product.

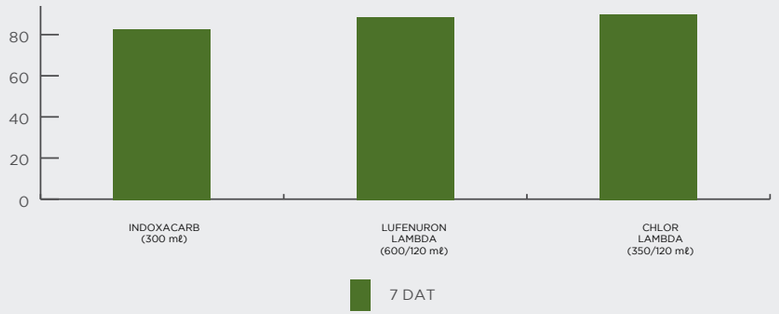
Trade name	Active Ingriedient	Target Species
ADDITION 150 SC	indoxacarb	Maize stalk borer, sorghum stem borer, african bollworm
ALPHA-THRIN 100 SC	alpha-cypermethrin	African bollworm, cutworms, stalk borer
ARENA 206 EC	benfuracarb + lambda-cyhalothrin	Busseola stalk borer, chilo stem borer
CARBOTERR 100 GR	carbofuran	Black maize beetle, false wireworms, astylus larvae, maize rootworm, leafhoppers (vectors of streak disease), nematodes and ground weevils, stalk borer
CHLORPYRIFOS 480 EC	chlorpyrifos	Black maize beetle, stalk borer
COUNTER FC 15G®	terbufos	Astylus beetle larvae, false wireworm, nematodes, rootworm and wireworms
DELTA-THRIN 25 EC	deltamethrin	African bollworm, cutworms
JUDOX 148 SC	indoxacarb (oxadiazine)	Stalk borer and sorghum stem borer
LAMBDA 50EC / JUDO 50 EC	lambda-cyhalothrin	Maize stalk borer, sorghum stem borer, african bollworm
LAMBDA SECURE 106 CS / JUDO SECURE 106 CS	lambda-cyhalothrin	Cutworm, african bollworm, maize stalk borer, sorghum stem borer
LINEAR 350 EC	lamda-cyhalothrin + chlorpyrifos	Maize stalk borer, sorghum stem borer, fall army worm
METHOMYL 90 SP	methomyl	African bollworm
PLATOON® 310 SL	oxamyl	Nematodes
POLYTRIN 200 EC	cypermethrin	Pink stalk borer, stalk borer, cutworm, african bollworm & suppression of leafhoppers
PRIME 50 EC	lufenuron	Sorghum stem borer, maize stalk borer
RAMBA 100 EC	bifenthrin	Two-spotted spider mite, maize stalk borer sorghum stem borer
RONSEK 600 FS	imidacloprid	Astylus larvae, black maize beetle, false wire worms, ground weevils, leafhopper
SORENTO 600 FS	thiamethoxam	Spotted maize beetle larvae, black maize beetle, false wire worms, ground weevils, maize leafhopper

ADDITION 150 SC

INSECTICIDE

Active ingredient: Indoxacarb (oxadiazine) 150 g/ℓ
(Reg No. L 9146, Act 36 of 1947)

A suspension concentrate stomach and contact insecticide for the control of maize stalk borer *(Busseola fusca)*, sorghum stem borer *(Chilo partellus)* and African bollworm *(Helicoverpa armigera)*.



Summary of trials showing the percentage efficacy of ADDITION 150 SC

USE RATE†
Maize stalk borer, sorghum stem borer & African bollworm
- 300 mℓ/ha ADDITION 150 SC plus 120 mℓ/ha LAMBDA 50 EC plus approved Villa Buffer

REGISTRATION DETAILS†
ADDITION 150 SC
Active ingredient: Indoxacarb (oxadiazine) 150 g/ℓ
Reg. No. L 9146 , Act 36 of 1947
(harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

REGISTRATION DETAILS†
LAMBDA 50 EC
Active ingredient: Lambda-cyhalothrin (pyrethroid) 50 g/l
(Reg. No. L7787 Act 36 of 1947)
(harmful)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

PACKAGING
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INSECTICIDE

ADDITION 150 SC

Active ingredient: Indoxacarb (oxadiazine) 150 g/ℓ
(Reg No. L 9146, Act 36 of 1947)

A suspension concentrate stomach and contact insecticide for the control of maize stalk borer *(Busseola fusca)*, sorghum stem borer *(Chilo partellus)* and African bollworm *(Helicoverpa armigera)*.

Features

- ADDITION 150 SC is an IRAC insecticide group code 22.
- Stomach and contact action.
- Strong anti-feeding action.
- Centre pivot registration.
- Tank-mix compatible with lambda-cyhalothrin.
- Effective under hot climatic conditions.
- ADDITION 150 SC acts by inhibition of sodium ion entry into nerve cells. This results in paralysis and death of the pest within 1 to 2 days. However, inhibition of the pest's feeding occurs within 2 to 8 hours.
- ADDITION 150 SC acts as a larvacide through ingestion (stomach action), as well as cuticular absorption (contact action).
- ADDITION 150 SC has minimal effect on beneficial insects and mites, thus promoting natural pest control and decreasing the risk of resistance development.
- ADDITION 150 SC is mainly a *Lepidoptera* (caterpillar type larvae of moths & butterflies) specific insecticide.

Do's and don'ts

- Apply preventively, before 5% infestation.
- Under conditions of repeated infestation apply ADDITION 150 SC in a 10 - 14 day programme.
- Do not exceed the maximum of 3 applications per season.
- The absence of rain or irrigation within 3 days of application can lead to a decrease in control.
- Do not apply ADDITION 150 SC on maize that is under drought stress.
- Apply before larvae migrate to the stems of the maize plants and larvae have not developed beyond second instar stage.
- Do not apply on maize while the tassels are encircled by the flag leaf.

USE RATE†
Maize stalk borer, sorghum stem borer & African bollworm
- 300 mℓ/ha ADDITION 150 SC plus 120 mℓ/ha LAMBDA 50 EC plus approved Villa Buffer

REGISTRATION DETAILS†
ADDITION 150 SC
Active ingredient: Indoxacarb (oxadiazine) 150 g/ℓ
Reg. No. L 9146 , Act 36 of 1947
(harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

REGISTRATION DETAILS†
LAMBDA 50 EC
Active ingredient: Lambda-cyhalothrin (pyrethroid) 50 g/l
(Reg. No. L7787 Act 36 of 1947)
(harmful)

Registration holder:
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Reg. No. 1983/008184/07
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INSECTICIDE

ALPHA-THRIN 100 SC

Active ingredient: Alpha-cypermethrin (pyrethroid) 100 g/ℓ
(Reg No. L 7425, Act 36 of 1947)

A synthetic pyrethroid insecticide with a contact and stomach action for the control of cutworm *(Agrotis ipsilon),* maize stalk borer *(Busseola fusca)* and African bollworm *(Helicoverpa armigera)* in maize and sweetcorn.




Features

- ALPHA-THRIN 100 SC is a synthetic pyrethroid, IRAC group code 3 insecticide.
- ALPHA-THRIN 100 SC is a contact and stomach insecticide with a rapid knockdown effect and a long residue for the control of insects in maize.
- Alpha-cypermethrin affects the nervous system of an insect resulting in paralysis and death.
- Highly effective at relatively low dosage rates.
- Compatible with Villa approved buffer and surfactant adjuvants and COMMODOBUFF.
- As a pyrethroid, contact insecticide it is absorbed quickly through the outer cuticle (exoskeleton) of the insect.
- Affected larvae rapidly cease feeding and ultimately die.
- Effective against first and second instar larvae of maize stalk borer.
- May be applied by aerial application.
- Single product for the control of several pests of maize.

USE RATE†

Cutworm
- 65 mℓ/ha (all crops)

Sweetcorn: African bollworm *(Helicoverpa armigera)* & Stalk borers *(Busseola fusca & Sesamia calamistis)*
- 100 mℓ/ha.

Maize: Stalk borer *(Busseola fusca)*
- 125mℓ/ha,

African bollworm *(Helicoverpa armigera)*
- 100mℓ/ha.

REGISTRATION DETAILS†
ALPHA-THRIN 100 SC
Active ingredient: alpha-cypermethrin 100g/ℓ
Reg. No. L 7425, Act 36 of 1947
(caution)

COMMODOBUFF
Active ingredient: Organic acid and alkali 660g/ℓ
Reg. No. L5390, Act 36 of 1947
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Co. Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

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WINFIELD® UNITED

INSECTICIDE

ALPHA-THRIN 100 SC

Active ingredient: Alpha-cypermethrin (pyrethroid) 100 g/ℓ
(Reg No. L 7425, Act 36 of 1947)

A synthetic pyrethroid insecticide with a contact and stomach action for the control of cutworm *(Agrotis ipsilon),* maize stalk borer *(Busseola fusca)* and African bollworm *(Helicoverpa armigera)* in maize and sweetcorn.

Do's and don'ts

- Application for stalk borer should be based on scouting.
- Apply 7 to 10 days after 5 % or more plants are infested with eggs.
- If scouting shows that eggs have already hatched, spray immediately.
- For the control of stalk borer, direct spray into plant funnel area.
- Effectiveness of ALPHA-THRIN 100 SC can be affected by very hard water (> 1000 p.p.m. solutes), and/or water with a high pH value.
- A second application may be required 10 to 14 days later.
- Thorough wetting and penetration of the plants is important.
- Larvae longer than 10 mm that have already tunnelled into the stalk, will not be controlled successfully.
- For cutworm control apply only if the top 3 cm of the soil is moist.

USE RATE†

Cutworm
- 65 mℓ/ha (all crops)

Sweetcorn: African bollworm *(Helicoverpa armigera)* & Stalk borers *(Busseola fusca & Sesamia calamistis)*
- 100 mℓ/ha.

Maize: Stalk borer *(Busseola fusca)*
- 125mℓ/ha,

African bollworm *(Helicoverpa armigera)*
- 100mℓ/ha.

REGISTRATION DETAILS†

ALPHA-THRIN 100 SC
Active ingredient: alpha-cypermethrin 100g/ℓ
Reg. No. L 7425, Act 36 of 1947
(caution)

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Active ingredient: Organic acid and alkali 660g/ℓ
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Registration holder:
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INSECTICIDE

ARENA 206 EC

Active ingredient: Benfuracarb (carbamate) 200 g/ℓ plus lambda-cyhalothrin (pyrethroid) 6 g/ℓ
(Reg No. L 8532, Act 36 of 1947)

An emulsifiable concentrate insecticide mixture with contact, stomach and systemic action for the control of maize stalk borer *(Busseola fusca)* and sorghum stem borer *(Chilo partellus)* on maize.

USE RATE†
Maize stalk borer and sorghum stemborer
- 1000 mℓ /ha ARENA 206 EC
  NB: Organosilicone adjuvants such as DIRECT at 0.05% is recommended to increase the spreading of spray droplets

REGISTRATION DETAILS†
ARENA 206 EC
Active ingredient: Benfuracarb (carbamate) 200 g/ℓ plus lambda-cyhalothrin (pyrethroid) 6 g/ℓ
Reg. No. L 8532, Act 36 of 1947
(harmful)

DIRECT
Active ingredient: Polyether-polymethylsiloxane-copolymer 300 g/ℓ and vegetable oil 650 g/ℓ
Reg. No. L8680, Act 36 of 1947
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
20 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

INSECTICIDE

ARENA 206 EC

Active ingredient: Benfuracarb (carbamate) 200 g/ℓ plus lambda-cyhalothrin (pyrethroid) 6 g/ℓ
(Reg No. L 8532, Act 36 of 1947)

An emulsifiable concentrate insecticide mixture with contact, stomach and systemic action for the control of maize stalk borer *(Busseola fusca)* and sorghum stem borer *(Chilo partellus)* on maize.

Features

- ARENA 206 EC is an IRAC group code 1A + 3 insecticide.
- Contains benfuracarb (carbamate) and lambda-cyhalothrin (pyrethroid).
- Benfuracarb acts systemically and can protect plants for long periods with its long-lasting efficacy.
- Lambda-cyhalothrin has a contact and stomach action and has an excellent knockdown action.
- Allows for flexibility of application usage.
- ARENA 206 EC is an ideal insecticide for use in programmes aimed at combatting resistance.
- Rarely bio-accumulates or causes major environmental effects.
- Acts as a larvacide through contact action and ingestion (stomach action).
- ARENA 206 EC provides superior control of maize stalk borer, provided it is applied before the larvae have penetrated the plant.
- ARENA 206 EC is compatible with adjuvants like DIRECT.
- ARENA 206 EC may be applied by aerial application.

Do's and don'ts

- If a severe infestation is expected apply preventatively.
- Corrective application must be applied before or up to 5% of plants show early damage ("shot hole").
- Larvae should not exceed 10 mm in length at the time of application.
- Poor control may be obtained if larvae have penetrated the plant prior to application.
- For most effective control direct spray into the plants funnel area.
- Never apply ARENA 206 EC to plants nearing maturity as they are no longer growing actively; and the plants systemic activity is significantly decreased.
- Do not apply ARENA 206 EC if crop is under stress (i.e. drought) as this decreases the plants systemic activity.
- Do not mix with seaweed extracts, amitraz, chinomethionat and prothiophos.

USE RATE†
Maize stalk borer and sorghum stemborer
- 1000 mℓ /ha ARENA 206 EC
NB: Organosilicone adjuvants such as DIRECT at 0.05% is recommended to increase the spreading of spray droplets

REGISTRATION DETAILS†
ARENA 206 EC
Active ingredient: Benfuracarb (carbamate) 200 g/ℓ plus lambda-cyhalothrin (pyrethroid) 6 g/ℓ
Reg. No. L 8532, Act 36 of 1947
(harmful)

DIRECT
Active ingredient: Polyether-polymethylsiloxane-copolymer 300 g/ℓ and vegetable oil 650 g/ℓ
Reg. No. L8680, Act 36 of 1947
(caution)

Registration holder:
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PACKAGING
20 ℓ

ALWAYS READ THE LABEL

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CARBOTERR 100 GR

INSECTICIDE

Active ingredient: carbofuran (carbamate) 100 g/kg
(Reg. No. L7182 Act 36 of 1947)

A soil applied, systemic, granular insecticide and nematicide for the control of soil insects, stalk borer and streak disease in maize.



Photo 1. Black maize beetle (Heteronychus arator).
Photo 2. Black maize beetle feeding damage at the base of maize plant.
Photo 3. Maize field damaged by Black maize beetle.

Features

- A systemic granular insecticide and nematicide containing carbofuran 100 g/kg, IRAC insecticide group code 1A
- CARBOTERR 100 GR is used as a granular insecticide applied with a granular applicator mounted on the planter and applied in the planting furrow with the seed.
- CARBOTERR 100 GR is systemic and is absorbed by the roots of the developing plant during and after germination.
- CARBOTERR 100 GR is translocated within the growing plant to the leaves and stem of the plant.
- CARBOTERR 100 GR also controls first generation maize stalk borer and leafhoppers, the vestor of streak disease, when used at the recommended dosage rate.
- The control of nematodes in maize is achieved at a rate of 150g/linear metre.

USE RATE†
- **False Wireworms & maize rootworm *(Buphonella murina)*:**
  100 g per 100 linear m of furrow.
- **Leafhoppers (vectors of Streak disease), nematodes & ground weevils *(Protostrophus spp.)*:**
  150g per 100 linear m of furrow.
- **Astylus larvae, stalk borer *(Busseola fusca)* & black maize beetle:**
  200g per 100 linear m furrow.

REGISTRATION DETAILS†
CARBOTERR 100 GR
Active ingredient: carbofuran
(carbamate) 100 g/kg
Reg. No. L7182 Act 36 of 1947
(harmful)

Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
25 kg

ALWAYS READ THE LABEL

CARBOTERR 100 GR

INSECTICIDE

Active ingredient: carbofuran (carbamate) 100 g/kg
(Reg. No. L7182 Act 36 of 1947)

A soil applied, systemic, granular insecticide and nematicide for the control of soil insects, stalk borer and streak disease in maize.

Do's and don'ts

- An accurate, properly calibrated granular-applicator must be used.
- The dosage rate being applied by the applicator must be checked several times each day.
- CARBOTERR 100 GR does not control cutworm so a suitable cutworm bait must be applied.
- Sufficient soil moisture is necessary for the release of the active ingredient.
- CARBOTERR 100 GR should not be mixed and applied simultaneously with a fertilizer from a single granular applicator.
- Irrespective of treatment with CARBOTERR 100 GR, 20 % or more of the maize crop may be damaged or destroyed by black maize beetle or ground weevils, under high infestation pressure.
- Under known high infestations of *Astylus* larvae, it is recommended to treat seed with an appropriate seed dressing product, specifically registered for this purpose.
- Incidence of streak disease may still occur, especially on very susceptible cultivars (particularly sweetcorn varieties and parent breeding lines) when planted in close proximity to host plants, such as wheat or sugarcane and in mid-summer plantings, when naturally occurring populations of leafhoppers are very high.

USE RATE†
- **False Wireworms & maize rootworm *(Buphonella murina)*:**
  100 g per 100 linear m of furrow.
- **Leafhoppers (vectors of Streak disease), nematodes & ground weevils *(Protostrophus spp.)*:**
  150g per 100 linear m of furrow.
- **Astylus larvae, stalk borer *(Busseola fusca)* & black maize beetle:**
  200g per 100 linear m furrow.

REGISTRATION DETAILS†
CARBOTERR 100 GR
Active ingredient: carbofuran (carbamate) 100 g/kg
Reg. No. L7182 Act 36 of 1947
(harmful)

Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
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PACKAGING
25 kg

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INSECTICIDE

CHLORPYRIFOS 480 EC

Active ingredient: Chlorpyrifos (organophosphate) 480 g/ℓ
(Reg No. L 7183, Act 36 of 1947)

An emulsifiable concentrate, contact insecticide with a respiratory action for the control of black maize beetle and stalk borer in maize.




Photo 1. Stand reduction in maize field caused by black maize beetle.
Photo 2. Maize plant damaged by black maize beetle.
Photo 3. Maize stalk borer – shot-hole damage.
Photo 4. Mature stalk borer larvae with pupa.

Features

- CHLORPYRIFOS 480 EC is an IRAC group code 1B organophosphate insecticide.
- As an organophosphate insecticide chlorpyrifos acts by inactivating the enzyme acetylcholinesterase, resulting in paralysis and death of the insect.
- May be incorporated into the soil prior to planting for the control of black maize beetle and applied as a foliar application for the control of maize stalk borer.
- CHLORPYRIFOS 480 EC is an emulsifiable concentrate, contact and stomach insecticide with a respiratory action for the control of black maize beetle and stalk borer in maize.
- Effective against black maize beetle when incorporated into the soil before planting.
- Provides very effective control of larvae of maize stalk borer when applied into the funnel of maize plants when shot-hole damage is observed.
- The respiratory action of chlorpyrifos assists with control of first and second instar stalk borer larvae feeding deep inside the maize funnel area.
- May be applied by aerial application.

ALWAYS READ THE LABEL

USE RATE†

Black maize beetle
- 1.0 ℓ /ha.

Maize Stalk borer
- 3.5 mℓ / 100 m row length in 3 ℓ water (350mℓ /ha).

REGISTRATION DETAILS†
CHLORPYRIFOS 480 EC
Active ingredient: chlorpyrifos (organophosphate) 480 g/ℓ
Reg. No. L7183, Act 36 of 1947
(Harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
5 ℓ, 20 ℓ

INSECTICIDE

CHLORPYRIFOS 480 EC

Active ingredient: Chlorpyrifos (organophosphate) 480 g/ℓ
(Reg No. L 7183, Act 36 of 1947)

An emulsifiable concentrate, contact insecticide with a respiratory action for the control of black maize beetle and stalk borer in maize.

Do's and don'ts

- Black maize beetle: Apply as an overall spray in at least 200lt water/ha and incorporate to a depth of 10 cm using a suitable disc.
- This application will also suppress Cutworm.
- Stalk borer: Apply when 5 % of the plants are infested with eggs or when 10 % plants show "shot hole" damage.
- Direct spray into plant funnel area.
- Repeat application if re-infestation occurs.
- Do not apply later than the stage when the tassels are enclosed by the flag leaf.
- Thorough wetting and penetration of the plants is important.
- Unsatisfactory control is obtained when larvae have already tunnelled into the stalk.
- Always wear correct protective clothing including masks and follow practices that minimise user exposure.
- CHLORPYRIFOS 480 EC is a pH sensitive insecticide, therefore apply in combination with a Villa registered pH buffer.

USE RATE†

Black maize beetle
- 1.0 ℓ /ha.

Maize Stalk borer
- 3.5 mℓ / 100 m row length in 3 ℓ water (350mℓ /ha).

REGISTRATION DETAILS†
CHLORPYRIFOS 480 EC
Active ingredient: chlorpyrifos (organophosphate) 480 g/ℓ
Reg. No. L7183, Act 36 of 1947
(Harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

METHOMYL 90 SP
Active ingredient: Methomyl 900 g/kg
Reg. No. L5931 , Act 36 of 1947
(very toxic)

Registration holder:
Universal Crop Protection (Pty) Ltd. Co.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

PACKAGING
5 ℓ, 20 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

COUNTER FC 15G®

INSECTICIDE

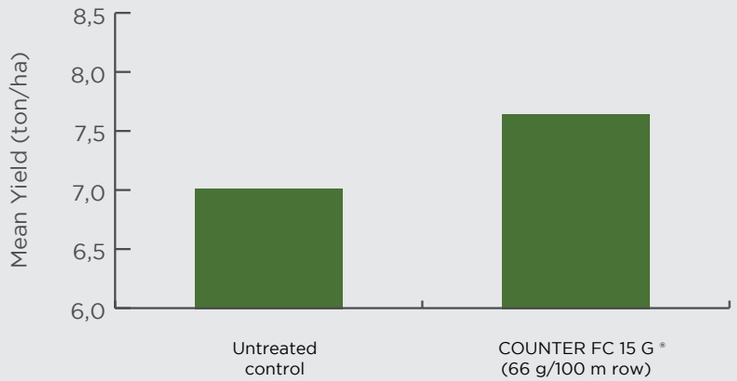
Active ingredient: Terbufos (organophosphate) 150g/kg
(Reg. No. L5571 Act 36 of 1947)

A granular soil applied contact and systemic insecticide and nematicide for the control of black maize beetle *(Heteronychus arator)*, spotted maize beetle larvae *(Astylus atromaculatus)*, nematodes *(Nematoda spp.)*, rootworms *(Buphonella spp.)* and false wireworms *(Tenebrionidae spp.)* in maize.




Photo 1. Irregular stand of maize infested with nematodes.
Photo 2. Maize roots showing symptoms of nematode infestation.
Photo 3. Black maize beetle.
Photo 4. Maize field damaged by black maize beetle.

The effect of COUNTER FC 15G in the control of nematodes on the overall yield of maize (tons per ha)



USE RATE†
Black maize beetle:
- 33 g COUNTER FC 15G® per 100 meter plant row.

Spotted maize beetle larvae, false wireworm,nematodes, rootworms and wireworms:
- 66 g COUNTER FC 15G® per 100 meter plant row

REGISTRATION DETAILS†
COUNTER FC 15G®
Active ingredient: Terbufos (organophosphate) 150g/kg
(Reg. No. L5571 Act 36 of 1947)
(toxic)

Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
18 kg

ALWAYS READ THE LABEL

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WINFIELD® UNITED

COUNTER FC 15G®

INSECTICIDE

Active ingredient: Terbufos (organophosphate) 150g/kg
(Reg. No. L5571 Act 36 of 1947)

A granular soil applied contact and systemic insecticide and nematicide for the control of black maize beetle *(Heteronychus arator)*, spotted maize beetle larvae *(Astylus atromaculatus)*, nematodes *(Nematoda spp.)*, rootworms *(Buphonella spp.)* and false wireworms *(Tenebrionidae spp.)* in maize.

Features

- COUNTER FC 15G® is a soil applied granular insecticide.
- Contact and systemic action.
- Cellulose based paper granule with natural breakdown, ensures reduced odour, dust free and improved flow-ability.
- Low risk of groundwater contamination.
- Does not leach downwards within the soil and thus highly effective where applied.
- It has a strong anti-feeding action, inhibition can occur within hours.

Do's and don'ts

- Do not allow the granules to come into direct contact with the seed.
- Apply only at planting time and ensure good coverage of granule with sufficient soil.
- Optimal results would be obtained in moist soils.
- Place granules by means of a planter mounted granular applicator directly ahead of the planter press wheel in a band of not more than 5 cm.

USE RATE†
Black maize beetle:
- 33 g COUNTER FC 15G® per 100 meter plant row.

Spotted maize beetle larvae, false wireworm,nematodes, rootworms and wireworms:
- 66 g COUNTER FC 15G® per 100 meter plant row

REGISTRATION DETAILS†
COUNTER FC 15G®
Active ingredient: Terbufos (organophosphate) 150g/kg
(Reg. No. L5571 Act 36 of 1947)
(toxic)

Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
18 kg

ALWAYS READ THE LABEL

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WINFIELD® UNITED

INSECTICIDE

DELTA-THRIN 25 EC

Active ingredient: Deltamethrin (pyrethroid) 25 g/ℓ
(Reg No. L7426, Act 36 of 1947)

A synthetic pyrethroid, emulsifiable concentrate, contact and stomach insecticide for the control of insects in maize and sweetcorn.




Features

- DELTA-THRIN 25 EC is a synthetic pyrethroid, IRAC group code 3 insecticide.
- DELTA-THRIN 25 EC is a contact and stomach pyrethroid insecticide with a rapid knockdown effect for the control of cutworm *(Agrotis spp.)* and African bollworm *(Helicoverpa armigera)* in maize and sweetcorn and chafer beetle, chilo stalk borer *(Chilo partellus)* and maize stalk borer *(Busseola fusca)* in maize.
- Deltamethrin affects the nervous system of an insect resulting in paralysis and death.
- Highly effective at relatively low dosage rates.
- Compatible with Villa approved buffer and surfactant adjuvants.
- As a pyrethroid, contact insecticide it is absorbed quickly through the outer cuticle (exoskeleton) of the insect.
- Affected larvae rapidly cease feeding.
- Effective against first and second instar larvae of maize stalk borer.
- May be applied by aerial application and chemigation.

USE RATE†

Cutworm
- 125 - 165 mℓ/ha (all crops)

Sweetcorn
- African bollworm (Helicoverpa armigera):
- 250 mℓ/ha

Maize: Chaffer beetle
- 600 mℓ/ha

African bollworm *(Helicoverpa armigera)* and Chilo stalk borer *(Chilo partellus)*
- 250 mℓ/ha

Stalk borer (Busseola fusca):
- 200 mℓ/ha

Control of cob damage during January to February generation:
- 250 mℓ/ha

REGISTRATION DETAILS†
DELTA-THRIN 25 EC
Active ingredient: deltamethrin 25 g/ℓ
Reg. No. L7426, Act 36 of 1947
(harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
1 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

DELTA-THRIN 25 EC

INSECTICIDE

Active ingredient: Deltamethrin (pyrethroid) 25 g/ℓ
(Reg No. L7426, Act 36 of 1947)

A synthetic pyrethroid, emulsifiable concentrate, contact and stomach insecticide for the control of insects in maize and sweetcorn.

Do's and Don't

- Application for stalk borer should be based on scouting.
- Apply 7 to 10 days after 5 % or more plants are infested with eggs.
- If scouting shows that eggs have already hatched, and 10 % of the plants show first signs of damage, spray immediately.
- For the control of stalk borer, direct spray into plant funnel area.
- Maintain scouting, and repeat application 12 to 14 days later, if re-infestation occurs.
- Thorough wetting and penetration of the plants is important.
- Unsatisfactory control is obtained when larvae are larger than 5 mm and have already tunnelled into the stalk.
- For satisfactory cutworm control it is important that the top 5 cms of soil is moist to the surface at the time of application.

USE RATE†

Cutworm
- 125 - 165 mℓ/ha (all crops)

Sweetcorn
- African bollworm (Helicoverpa armigera):
- 250 mℓ/ha

Maize: Chaffer beetle
- 600 mℓ/ha

African bollworm *(Helicoverpa armigera)* and Chilo stalk borer *(Chilo partellus)*
- 250 mℓ/ha

Stalk borer (Busseola fusca):
- 200 mℓ/ha

Control of cob damage during January to February generation:
- 250 mℓ/ha

REGISTRATION DETAILS†
DELTA-THRIN 25 EC
Active ingredient: deltamethrin 25 g/ℓ
Reg. No. L7426, Act 36 of 1947
(harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
1 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

MAIZE GROWTH STAGE SPRAY PROGRAMME
INSECTICIDE
HERBICIDE
FUNGICIDE
ADJUVANT
PLANT GROWTH REGULATOR
TANK CLEANER

JUDOX 148 SC

INSECTICIDE

Active ingredient: Indoxacarb (oxadiazine) 127.5 g/ℓ
+ lambda-cyhalothrin (pyrethroid) 20 g/ℓ
(Reg. No. L10779 Act 36 of 1947)

A suspension concentrate stomach and contact insecticide for the control of maize stalk borer *(Busseola fusca)* and sorghum stem borer *(Chilo partellus)* in maize.



Features

- JUDOX 148 SC is an IRAC group code 3 and 22 insecticide.
- JUDOX 148 SC has two actives ingredients in one product, ensuring good resistance management.
- Indoxacarb is a non-systemic, highly lipophilic, contact and stomach insecticide with a long residual effect on leaves.
- The main mode of action of indoxacarb is through blocking of neuronal sodium channels.
- Application of JUDOX 148 SC stops insect feeding immediately after application.
- Paralysis and death occurs within 1-2 days of application.
- Registered for ground and aerial application.

Do's and don'ts

- Apply preventively or when eggs are found on 5 % of the plants, or when 10 % of the plants are showing shot hole damage symptoms on the maize funnels.
- Under conditions of high infestation pressure, apply JUDOX 148 SC in a 10-day spray programme.
- DO NOT exceed two (2) applications of JUDOX 148 SC per season.
- JUDOX 148 SC will not control stalk borer once it has penetrated the stem.
- DO NOT apply when bees are most active. Do not direct spray towards beehives or allow spray drift in their vicinity.
- The absence of rain within three (3) days of application or irrigation after application can lead to a decrease in control with JUDOX 148 SC spray mixtures. Water after application is essential to wash the spray mixture in the funnel.
- Apply JUDOX 148 SC before larvae develops beyond the second instar (growth) stage.

USE RATE†
- Ground Application: JUDOX 148 SC 300 mℓ/ha plus CHARGE 25 mℓ/100 ℓ water in 300ℓ spray mixture

REGISTRATION DETAILS†
JUDOX 148 SC
Active ingredient: Indoxacarb (oxadiazine) 127.5 g/ℓ + lambda-cyhalothrin (pyrethroid) 20 g/ℓ
(Reg. No. L10779 Act 36 of 1947)
(harmful)

CHARGE
Active ingredient: polyether-polymethylsiloxane-copolymer 1000 g/ℓ
(Reg. No. L9100 Act 36 of 1947)
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
1 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

LAMBDA 50 EC / JUDO 50 EC

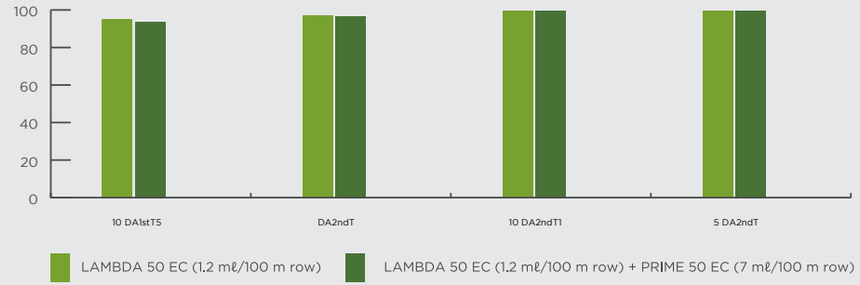
INSECTICIDE

Active ingredient: Lambda-cyhalothrin (pyrethroid) 50 g/ℓ
(Reg. No. L7787 (LAMBDA 50 EC) and L7785 (JUDO 50 EC)
Act 36 of 1947)

A synthetic pyrethroid insecticide with a contact and stomach action for the control of cutworm *(Agrotis ipsilon)*, sorghum stem borer *(Chilo partellus)*, maize stalk borer *(Busseola fusca)* and African bollworm *(Helicoverpa armigera)* in maize and sweetcorn.




Summary of 3 trials showing the performance of LAMBDA 50 EC /JUDO 50 EC for the control of maize stalk borers (Busseola fusca) in maize. Graph shows the percentages control of stalk borers.



USE RATE†
- **Sorghum stem borer and maize stalk borer:** 120 mℓ/ha (refer to label for recommendations on tank-mix partners with ADDITION 150 SC and PRIME 50 EC)
- **Cutworm:** 70 mℓ/ha

REGISTRATION DETAILS†

LAMBDA 50 EC
Active ingredient: Lambda-cyhalothrin (pyrethroid) 50 g/ℓ
Reg. No. L7787, (LAMDA 50 EC) and L7785 (JUDO 50 EC) Act 36 of 1947 (harmful)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

ADDITION 150 SC
Active ingredient: Indoxacarb (oxadiazine) 150 g/ℓ
Reg. No. L 9146, Act 36 of 1947 (harmful)

JUDO 50 EC
Active ingredient: lambda-cyhalothrin (pyrethroid) 50 g/ℓ
Reg. No. L 7785, Act 36 of 1947, (harmful)

PRIME 50 EC
Active ingredient: lufenuron (benzamide) 50 g/ℓ
Reg. No. L8660 Act 36 of 1947

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
1 ℓ & 5 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

LAMBDA 50 EC / JUDO 50 EC

INSECTICIDE

Active ingredient: Lambda-cyhalothrin (pyrethroid) 50 g/ℓ
(Reg. No. L7787 (LAMBDA 50 EC) and L7785 (JUDO 50 EC)
Act 36 of 1947)

A synthetic pyrethroid insecticide with a contact and stomach action for the control of cutworm *(Agrotis ipsilon)*, sorghum stem borer *(Chilo partellus)*, maize stalk borer *(Busseola fusca)* and African bollworm *(Helicoverpa armigera)* in maize and sweetcorn.

Features

- LAMBDA 50 EC/JUDO 50 EC is a synthetic pyrethroid, IRAC group code 3 insecticide.
- As a pyrethroid, lambda - cyhalothrin affects the nervous system of an insect resulting in paralysis and death.
- Rapid knockdown effect.
- Compatible with ADDITION 150 SC, PRIME 50 EC and Villa approved buffer and surfactant adjuvants.
- As a contact insecticide it is absorbed quickly through the outer cuticle (exoskeleton) of the insect.
- Affected larvae rapidly cease feeding and may fall off the crop.
- Effective against first and second instar larvae of maize stalkborers.
- May be applied by aerial application.
- Single product for the control of a number of pests of maize.
- In a tank mixture with ADDITION 150 SC, LAMBDA 50 EC / JUDO 50 EC may be applied by centre pivot irrigation.

Do's and don'ts

- Apply as soon as 10 % plants show damage or eggs are found on 5 % of the plants.
- Direct spray into plant funnel area.
- Use at least 3 litres water per 100 m row.
- Water after application is essential to wash spray mixture into the funnel.
- A second application may be required 10 to 14 days later.
- Do not exceed the maximum of 3 applications per season.
- For cutworm control apply only if the top 3 cm of the soil is moist.

USE RATE†
- **Sorghum stem borer and maize stalk borer:** 120 mℓ/ha (refer to label for recommendations on tank-mix partners with ADDITION 150 SC and PRIME 50 EC)
- **Cutworm:** 70 mℓ/ha

REGISTRATION DETAILS†

LAMBDA 50 EC
Active ingredient: Lambda-cyhalothrin (pyrethroid) 50 g/ℓ
Reg. No. L7787, (LAMDA 50 EC) and L7785 (JUDO 50 EC) Act 36 of 1947
(harmful)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

ADDITION 150 SC
Active ingredient: Indoxacarb (oxadiazine) 150 g/ℓ
Reg. No. L 9146, Act 36 of 1947
(harmful)

JUDO 50 EC
Active ingredient: lambda-cyhalothrin (pyrethroid) 50 g/ℓ
Reg. No. L 7785, Act 36 of 1947, (harmful)

PRIME 50 EC
Active ingredient: lufenuron (benzamide) 50 g/ℓ
Reg. No. L8660 Act 36 of 1947

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
1 ℓ & 5 ℓ

ALWAYS READ THE LABEL

LAMBDA SECURE 106 CS /JUDO SECURE 106 CS

INSECTICIDE

Active ingredient: Lambda-cyhalothrin (pyrethroid) 106 g/ℓ
(Reg. No. L8939 (LAMBDA SECURE 106 CS) and L8938
(JUDO SECURE 106 CS) Act 36 of 1947)

An encapsulated suspension concentrate, synthetic pyrethroid insecticide with a contact and stomach action for the control of cutworm *(Agrotis ipsilon)*, sorghum stem borer *(Chilo partellus)*, maize stalk borer *(Busseola fusca)* and African bollworm *(Helicoverpa armigera)* in maize and Pink stalk borer in sweetcorn.




Features

- LAMBDA SECURE 106 CS /JUDO SECURE 106 CS is an encapsulated suspension concentrate, synthetic pyrethroid, IRAC group code 3 insecticide.
- As a pyrethroid, lambda - cyhalothrin affects the nervous system of an insect resulting in paralysis and death.
- Rapid knockdown effect.
- Encapsulated formulation provides an extended residual effect.
- Compatible with ADDITION 150 SC, PRIME 50 EC and Villa approved buffer and surfactant adjuvants.
- As a contact insecticide it is absorbed quickly through the outer cuticle (exoskeleton) of the insect.
- Affected larvae rapidly cease feeding and may fall off the crop.
- Effective against first and second instar larvae of maize stalk borers.
- Single product for the control of a number of pests of maize.
- May be used in combination with ADDITION 150 SC to improve stalk borer control in maize.
- May be applied by aerial application.
- In a tank mixture with ADDITION 150 SC, LAMBDA 106 CS /JUDO SECURE 106 CS may be applied by centre pivot irrigation.

ALWAYS READ THE LABEL

USE RATE†
- **Maize stalk borer and sorghum stem borer:** 50 mℓ/ha (refer to label for recommendations on tank-mix partners with ADDITION 150 SC and PRIME 50 EC)
- **Cutworm:** 35 mℓ/ha

REGISTRATION DETAILS†
LAMBDA SECURE 106 CS /
JUDO SECURE 106 CS
Active ingredient: Lambda-cyhalothrin (pyrethroid) 106 g/ℓ
(Reg. No. L8939 (LAMDA SECURE 106 CS) and L8938 (JUDO SECURE 106 CS) Act 36 of 1947) (harmful)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

ADDITION 150 SC
Active ingredient: Indoxacarb (oxadiazine) 150 g/ℓ
Reg. No. L 9146 , Act 36 of 1947
(harmful)

PRIME 50 EC
Active ingredient: lufenuron (benzamide) 50 g/ℓ
(Reg. No. L8660 Act 36 of 1947)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
1 ℓ

LAMBDA SECURE 106 CS /JUDO SECURE 106 CS

INSECTICIDE

Active ingredient: Lambda-cyhalothrin (pyrethroid) 106 g/ℓ
(Reg. No. L8939 (LAMBDA SECURE 106 CS) and L8938
(JUDO SECURE 106 CS) Act 36 of 1947)

An encapsulated suspension concentrate, synthetic pyrethroid insecticide with a contact and stomach action for the control of cutworm *(Agrotis ipsilon)*, sorghum stem borer *(Chilo partellus)*, maize stalk borer *(Busseola fusca)* and African bollworm *(Helicoverpa armigera)* in maize and Pink stalk borer in sweetcorn.

Do's and don'ts

- Apply as soon as 10 % plants show damage or eggs are found on 5 % of the plants.
- Direct spray into plant funnel area.
- Use at least 3 litres water per 100 m row.
- Water after application is essential to wash spray mixture into the funnel.
- A second application may be required 10 to 14 days later.
- Do not exceed the maximum of 3 applications per season.
- For cutworm control apply only if the top 3 cm of the soil is moist.
- Do not mix LAMBDA SECURE 106 CS /JUDO SECURE 106 CS with seaweed extracts.

USE RATE†
- **Maize stalk borer and sorghum stem borer:** 50 mℓ/ha (refer to label for recommendations on tank-mix partners with ADDITION 150 SC and PRIME 50 EC)
- **Cutworm:** 35 mℓ/ha

REGISTRATION DETAILS†
LAMBDA SECURE 106 CS /
JUDO SECURE 106 CS
Active ingredient: Lambda-cyhalothrin (pyrethroid) 106 g/ℓ
(Reg. No. L8939 (LAMDA SECURE 106 CS) and L8938 (JUDO SECURE 106 CS) Act 36 of 1947)
(harmful)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

ADDITION 150 SC
Active ingredient: Indoxacarb (oxadiazine) 150 g/ℓ
Reg. No. L 9146 , Act 36 of 1947
(harmful)

PRIME 50 EC
Active ingredient: lufenuron (benzamide) 50 g/ℓ
(Reg. No. L8660 Act 36 of 1947)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
1 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

INSECTICIDE

LINEAR 350 EC

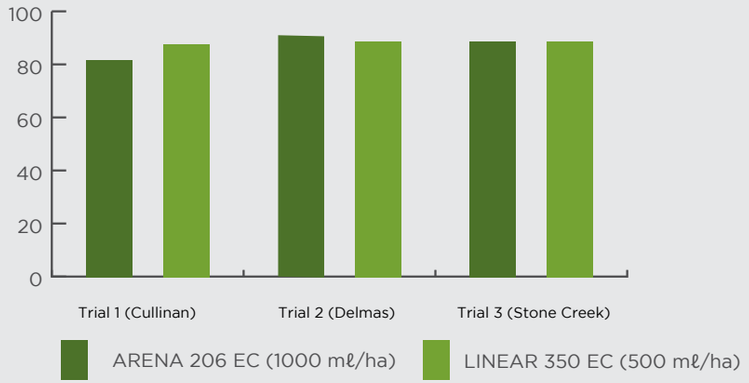
Active ingredient: Lambda-cyhalothrin (pyrethroid) 12 g/ℓ
& chlorpyrifos (organophosphate) 338 g/ℓ
(Reg No. L 8602, Act 36 of 1947)

An emulsifiable concentrate, formulated insecticide mixture with contact and stomach action for the control of maize stalk borer *(Busseola fusca),* sorghum stem borer *(Chilo partellus)* and fall army worm *(Spodopterafrugiperda)* in maize.





Summary of 3 trials showing the percentage efficacy of LINEAR 350 EC against stalk borers (Busseola fusca and Chilo partellus) in maize



USE RATE†
Maize stalk borer, sorghum stem borer and fall army worm
- 5.0 mℓ LINEAR 350 EC per 100 m row (ground applications) and 500 mℓ /ha LINEAR 350 EC (aerial application in 30 ℓ water per hectare)

REGISTRATION DETAILS†
LINEAR 350 EC
Active ingredient: Lambda-cyhalothrin (pyrethroid) 12 g/ℓ & chlorpyrifos (organophosphate) 338 g/ℓ
Reg. No. L 8602, Act 36 of 1947
(harmful)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

PACKAGING
5 ℓ, 20 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

INSECTICIDE

LINEAR 350 EC

Active ingredient: Lambda-cyhalothrin (pyrethroid) 12 g/ℓ
& chlorpyrifos (organophosphate) 338 g/ℓ
(Reg No. L 8602, Act 36 of 1947)

An emulsifiable concentrate, formulated insecticide mixture with contact and stomach action for the control of maize stalk borer *(Busseola fusca),* sorghum stem borer *(Chilo partellus)* and fall army worm *(Spodopterafrugiperda)* in maize.

Features

- LINEAR 350 EC is an IRAC group code 3A + 1B insecticide.
- Two active ingredients with different modes of action.
- Excellent penetration into the maize funnel where larvae feed.
- LINEAR 350 EC is a formulated insecticide mixture with a contact, stomach and respiratory action for the control of maize stalk borer *(Busseola fusca)* and sorghum stem borer *(Chilo partellus)* in maize.
- Excellent knockdown effect.
- The respiratory effect of chlorpyrifos assists with the control of larvae that are feeding in the maize funnel.

Do's and don'ts

- Direct the application into the funnel area of the plants. Ensure thorough coverage and wetting of this area.
- Apply a minimum of 300 ℓ of spray mixture per hectare (ground application).
- Add a Villa approved surfactant.
- Apply preventively to 1st and 2nd instar larvae.
- Monitor efficacy 3 days after application.
- A further application may be necessary if unacceptable levels of control have been obtained.
- Do not mix with seaweed extracts.

USE RATE†
Maize stalk borer, sorghum stem borer and fall army worm
- 5.0 mℓ LINEAR 350 EC per 100 m row (ground applications) and 500 mℓ /ha LINEAR 350 EC (aerial application in 30 ℓ water per hectare)

REGISTRATION DETAILS†
LINEAR 350 EC
Active ingredient: Lambda-cyhalothrin (pyrethroid) 12 g/ℓ & chlorpyrifos (organophosphate) 338 g/ℓ
Reg. No. L 8602, Act 36 of 1947
(harmful)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

PACKAGING
5 ℓ, 20 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

INSECTICIDE

METHOMYL 90 SP

Active ingredient: Methomyl 900 g/kg
(Reg No. L5931, Act 36 of 1947)

A water-soluble powder insecticide for the control of African bollworm *(Helicoverpa armigera)* on maize.



Features

- METHOMYL 90 SP belongs to the carbamates chemical group.
- Broad spectrum insecticide.
- Contact, translaminar as well as systemic.
- Rapid knockdown (paralysis, thus insects stop feeding, followed by eventual death) and good residual activity (active for longer periods of time).

Do's and don'ts

- Apply at first signs of infestation of African bollworm.
- Integrate other control methods (chemical, cultural and biological) into insect control programme to limit resistance development.
- Repeat applications if necessary.
- If larvae have entered the cob, then the METHOMYL 90 SP application will not be effective; thus ensure that application is done as soon as larvae are observed on silks.
- Ensure 7 day withholding period before harvest or grazing of maize and sorghum.

USE RATE†
African bollworm
- 200 g/ha METHOMYL 90 SP (applied in 30 ℓ of water per hectare for aerial applications)
- 200 g/ha METHOMYL 90 SP (applied in 100 to 200 ℓ of water per hectare for ground applications) or 50 g METHOMYL 90 SP per 100ℓ water (apply in up to 400 ℓ spray mixture per hectare)

REGISTRATION DETAILS†
METHOMYL 90 SP
Active ingredient: Methomyl 900 g/kg
Reg. No. L5931 , Act 36 of 1947
(very toxic)

Registration holder:
Universal Crop Protection (Pty) Ltd. Co.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
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PACKAGING
1 kg

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WINFIELD® UNITED

PLATOON 310 SL

INSECTICIDE

Active ingredient: oxamyl (carbamate) 310 g/ℓ
(Reg. No. L7913 Act 36 of 1947)

A water soluble liquid, systemic nematicide for use in a management programme for extended protection against nematodes on maize.

Features

- PLATOON 310 SL is an IRAC group code 1A insecticide.
- PLATOON 310 SL controls nematodes in maize when used in a programme.
- Highly systemic translocating rapidly upwards and downwards.
- Carbamate group of insecticides, known to stimulate root development.

Do's and don'ts

- Apply PLATOON 310 SL as a foliar application, 6 weeks after full emergence of the crop only as a follow up application to a COUNTER FC 15G application during planting.
- Water with a pH higher than 7, should be buffered to pH 5 to 6.
- When applying the COUNTER FC 15G and PLATOON 310 SL nematode management programme refer to the "USE RESTRICTIONS" on mesotrione herbicide labels where Mesotrione is to be used as a pre- and/or post-emergence herbicide in maize.
- Reduced efficacy might occur when stress factors such as drought impairs translocation.

USE RATE†
- 40 mℓ / 100 m row

REGISTRATION DETAILS†
PLATOON 310 SL
Active ingredient: oxamyl (carbamate) 310 g/ℓ
Reg. No. L7913, Act 36 of 1947
(very toxic)

COUNTER FC 15G®
Active ingredient: Terbufos (organophosphate) 150g/kg
(Reg. No. L5571 Act 36 of 1947)

Registration holder:
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PACKAGING
5 ℓ & 10 ℓ

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WINFIELD® UNITED

POLYTRIN 200 EC

INSECTICIDE

Active ingredient: Cypermethrin (pyrethroid) 200 g/ℓ
(Reg No. L 5409, Act 36 of 1947)

A synthetic pyrethroid, emulsifiable concentrate, contact and stomach insecticide for the control of certain insects in maize and sweetcorn.




Features

- POLYTRIN 200 EC is a synthetic pyrethroid, IRAC Group code 3 insecticide.
- An emulsfiable concentrate, fast acting, contact and stomach insecticide.
- Cypermethrin affects the nervous system of an insect resulting in paralysis and death.
- Rapid knockdown effect.
- Highly effective at relatively low dosage rates.

Do's and don'ts

- Spraying should commence about 5 to 7 days after 5 % or more plants are found to be infested with newly laid eggs.
- Repeat treatment when new egg deposits are detected.
- For the control of stalk borer, direct spray into plant funnel area.
- Repeat application if re-infestation occurs.
- Thorough wetting and penetration of the plants is important.
- Unsatisfactory control is obtained when larvae have already tunnelled into the stalk.
- For satisfactory cutworm control it is important that the top 5 cms of soil is moist at the time of application.
- The efficacy of POLYTRIN 200 EC can be impaired by a high pH value of the spray mixture.
- Use COMMODOBUFF buffer at the registered rate to adjust the pH of the water.

USE RATE†

Cutworm
- 100 mℓ/ha (all crops).

Maize and Sweetcorn: Pink stalk borer
- 150 mℓ/ha.

Maize Stalk borer
- 350 mℓ/ha.

African bollworm *(Helicoverpa armigera)* and suppression of leaf hoppers
- 150 mℓ/ha.

REGISTRATION DETAILS†
POLYTRIN 200 EC
Active ingredient: cypermethrin 200 g/ℓ
Reg. No. L 5409, Act 36 of 1947
(caution)

COMMODOBUFF
Active ingredient: Organic acid and alkali 660g/ℓ
Reg. No. L5390, Act 36 of 1947
(caution)

Registration holder:
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PACKAGING
1 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

PRIME 50 EC

INSECTICIDE

Active ingredient: lufenuron (benzamide) 50 g/ℓ
(Reg. No. L8660 Act 36 of 1947)

An emulsifiable concentrate contact and stomach insecticide for the control of maize stalk borer *(Busseola fusca)* and sorghum stem borer *(Chilo partellus)* in maize.

Features

- PRIME 50 EC is a IRAC insecticide group code 15.
- PRIME 50 EC is an effective alternative insecticide for the control of foliage feeding Lepidopterous pests (larvae of moths and butterflies) resistant to insecticides from other mode of action groups (e.g. pyrethroids or organophosphates).
- PRIME 50 EC shows good stomach and medium contact activity.
- PRIME 50 EC displays ovicidal activity.
- PRIME 50 EC is not pH sensitive.
- PRIME 50 EC is safe for honeybees.
- PRIME 50 EC will not harm predacious mite species.
- PRIME 50 EC has an aerial application registration.

Do's and don'ts

- For *Chilo partellus* apply as soon as 10 % plants show shot-hole damage and direct spray into the funnel area of the plants. If necessary, apply a follow-up treatment shortly before tasseling. A minimum of 3 litres spray mixture must be applied per 100 m row.
- In tank mixtures with LAMBDA 50 EC or LAMBDA SECURE 106 CS add a Villa approved buffer + surfactant adjuvant at the recommended rate.
- For *Busseola fusca* apply as soon as eggs are found on 5 % of the plants or 10 % plants show shot-hole damage. A second application may be required 10 to 14 days later. Direct sprays into plant funnel area. Use at least 3 litres water per 100 m row.

USE RATE†
- 7 mℓ/ 100 m row PLUS 1.2 mℓ/ 100 m row LAMBDA 50 EC OR 0.6 mℓ/ 100 m row LAMBDA SECURE 106 CS

REGISTRATION DETAILS†
PRIME 50 EC
Active ingredient: lufenuron (benzamide) 50 g/ℓ
(Reg. No. L8660 Act 36 of 1947)
(cuation)

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LAMBDA 50 EC
Active ingredient: Lambda-cyhalothrin (pyrethroid) 50 g/ℓ
(Reg. No. L7787 Act 36 of 1947)
(harmful)

LAMBDA SECURE 106 CS
Active ingredient: Lambda-cyhalothrin (pyrethroid) 106 g/ℓ
(Reg. No. L8939 Act 36 of 1947)
(harmful)

Registration holder:
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PACKAGING
1 ℓ, 5 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

RAMBA 100 EC

INSECTICIDE

Active ingredient: Bifenthrin (pyrethroid) 100 g/ℓ
(Reg. No. L9899 Act 36 of 1947)

An emulsifiable concentrate, synthetic pyrethroid insecticide and acaricide with a contact and stomach action for the control of two-spotted spider mite *(Tetranychus urticae)*, maize stalk borer *(Busseola fusca)*, sorghum stem borer *(Chilo partellus)*, and African bollworm *(Helicoverpa armigera)* in maize.




Features

- RAMBA 100 EC is an IRAC group code 3 insecticide and acaricide.
- As a pyrethroid, bifenthrin affects the nervous system of an insect/mite resulting in paralysis and death.
- Rapid knockdown effect.
- Highly effective at relatively low dosage rates.
- Compatible with ADDITION 150 SC and Villa approved buffer and surfactant adjuvants.
- As a contact insecticide it is absorbed quickly through the outer cuticle (exoskeleton) of the insect.
- Affected larvae rapidly cease feeding.
- May be used in combination with ADDITION 150 SC to improve stalk borer control in maize.
- Can be applied through center pivot.

USE RATE†
- **Two-spotted spider mite:** 500mℓ/ha
- **Maize stalk borer and Sorghum stem borer:** 3 mℓ/100 m row + 3 mℓ/100 m row ADDITION 150 SC + 25 mℓ/100 ℓ DIRECT.

REGISTRATION DETAILS†
RAMBA 100 EC
Active ingredient: Bifenthrin (pyrethroid) 100 g/ℓ
(Reg. No. L9899 Act 36 of 1947)
(harmful)

ADDITION 150 SC
Active ingredient: Indoxacarb (oxadiazine) 150 g/ℓ
Reg. No. L 9146 Act 36 of 1947
(harmful)

DIRECT
Active ingredient: Polyether-polymethylsiloxane-copolymer 300 g/ℓ and vegetable oil 650 g/ℓ
Reg. No. L8680, Act 36 of 1947
(caution)

Registration holder:
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PACKAGING
1 ℓ, 5 ℓ

ALWAYS READ THE LABEL

RAMBA 100 EC

INSECTICIDE

Active ingredient: Bifenthrin (pyrethroid) 100 g/ℓ
(Reg. No. L9899 Act 36 of 1947)

An emulsifiable concentrate, synthetic pyrethroid insecticide and acaricide with a contact and stomach action for the control of two-spotted spider mite *(Tetranychus urticae)*, maize stalk borer *(Busseola fusca)*, sorghum stem borer *(Chilo partellus)*, and African bollworm *(Helicoverpa armigera)* in maize.

Do's and don'ts

- Control of adult Two-spotted spider mites is aimed at covering the entire plant until after the soft dough stage of the cob.
- Ensure thorough wetting of the entire plant, especially the undersides of the leaves.
- May be applied by centre pivot irrigation in order to obtain improved coverage of the maize plant for the control of two spotted spider mite.
- The addition of a suitable wetter such as DIRECT is important.
- For the control of maize stalk borer apply as a full cover spray as soon as 10 % plants show damage or eggs are found on 5 % of the plants.
- For the control of maize stalk borer direct spray into plant funnel area.
- A second application may be required 7 to 10 days later.
- Do not exceed 2 applications per season.

USE RATE†
- **Two-spotted spider mite:** 500mℓ/ha
- **Maize stalk borer and Sorghum stem borer:** 3 mℓ/100 m row + 3 mℓ/100 m row ADDITION 150 SC + 25 mℓ/100 ℓ DIRECT.

REGISTRATION DETAILS†
RAMBA 100 EC
Active ingredient: Bifenthrin (pyrethroid) 100 g/ℓ
(Reg. No. L9899 Act 36 of 1947)
(harmful)

ADDITION 150 SC
Active ingredient: Indoxacarb (oxadiazine) 150 g/ℓ
Reg. No. L 9146 Act 36 of 1947
(harmful)

DIRECT
Active ingredient: Polyether-polymethylsiloxane-copolymer 300 g/ℓ and vegetable oil 650 g/ℓ
Reg. No. L8680, Act 36 of 1947
(caution)

Registration holder:
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PACKAGING
1 ℓ, 5 ℓ

ALWAYS READ THE LABEL

RONSEK 600 FS

INSECTICIDE

Active ingredient: imidacloprid (chloro-nicotinyl) 600 g/ℓ
(Reg. No. L8573 Act 36 of 1947)

A systemic insecticide seed treatment for the control of soil insects. RONSEK 600 FS acts as an insect neurotoxin and belongs to a class of chemicals called the neonicotinoids which act on the central nervous system of insects.

Photo 1: Black maize beetle (Heteronychus arator)
Photo 2: Black maize beetle feeding damage at the base of maize plant.
Photo 3: Maize field damaged by Black maize beetle.

Features

- RONSEK 600 FS is a IRAC group code 4A insecticide.
- RONSEK 600 FS is used as a seed treatment for the control of soil pests in maize.
- RONSEK 600 FS also controls leafhoppers, the vestor of streak disease when used at a higher dosage rate/100kg seed.
- Seed may be treated just prior to planting or may be treated earlier and stored under cool dry conditions for a season.
- Small quantities of seed may be treated in a manually operated drum suspended on an offset axle by two pivots.
- During storage the maize seed will be protected for 12 months from damage by storage pests.
- After a 12 month storage period, seed germination and insecticide activity will not be affected.
- Seed treatment is quick and easy and avoids the need for granular insecticide application for the control of soil pests of maize.

ALWAYS READ THE LABEL

- Maize seed previously treated with Captan may be treated with RONSEK 600 FS.

Do's and don'ts

- Ensure that each seed is properly covered with the seed-dressing.
- After adding the recommended mixture of RONSEK 600 FS with water, close the lid and rotate the drum slowly for 3 to 5 minutes.
- The drum should not be filled more than two thirds with seed.
- Maize seed treated with RONSEK 600 FS will not control cutworm or nematodes.
- Despite the use of RONSEK 600 FS, some black maize beetle and ground weevil damage may still occur.
- Under high infestation pressure, 20 % or more of the maize crop may be damaged or destroyed by black maize beetle or ground weevils.

USE RATE†
- ***Astylus* larvae:** 116 mℓ / 1.884 ℓ water / 100 kg seed.
- **Black maize beetle *(Heteronychus arator)*, Rootworms *(Buphonella spp.)*, False wire worms *(Tenebrionidae spp.)*, Groundweevils *(Protostrophus spp.)*:** 290 mℓ / 1.71 ℓ water / 100 kg seed
- Leafhopper (Cicadulina mbila, vector of streak disease): 580 mℓ / 1.42 ℓ water / 100 kg seed

REGISTRATION DETAILS†
RONSEK 600 FS
Active ingredient: imidacloprid (chloro-nicotinyl) 600 g/ℓ
(Reg. No. L8573 Act 36 of 1947)
(harmful)

Registration holder:
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PACKAGING
5 ℓ

SORENTO 600 FS

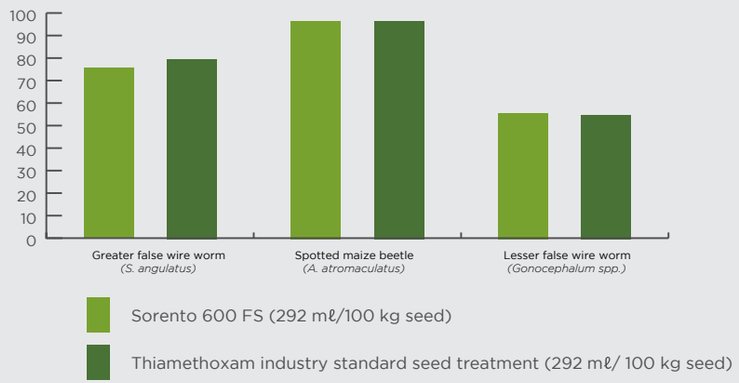
INSECTICIDE

Active ingredient: Thiamethoxam (neonicotinoid) 600 g/ℓ
(Reg. No. L9110, Act 36 of 1947)

A systemic insecticide seed treatment for the control of spotted maize beetle *(Astylus atromaculatus)* larvae, black maize beetle *(Heteronychus arator)*, false wire worms *(Tenebrionidae spp.),* ground weevils *(Protostrophus spp.)* and maize leafhopper *(Cicadulina mbila)*.

Photo 1: Black maize beetle (Heteronychus arator)
Photo 2: Black maize beetle feeding damage at the base of maize plant.
Photo 3: Maize field damaged by Black maize beetle.

Summary of 3 trials showing the performance of SORENTO 600 FS for the control of a number of different commonly occurring soil insects (greater false wire worms, spotted maize beetles & lesser false wire worms, respectively).



USE RATE†
- **Spotted maize beetle larvae, black maize beetle, false fire worms and ground weevils:** 0.5 mg active ingredient per kernel (2 parts water to one part SORENTO 600 FS)
- **Maize leafhopper:** 0.85 mg active ingredient per kernel (the volume of water to be added must be such that a final mixture volume of 1.5 ℓ is used per 100 kg of seed)
- NB The expected period of control after planting seed treated with SORENTO 600 FS is 42 days

REGISTRATION DETAILS†
SORENTO 600 FS
Active ingredient: Thiamethoxam (neonicotinoid) 600 g/ℓ
(Reg. No. L9110 Act 36 of 1947)

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1 ℓ, 5 ℓ

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SORENTO 600 FS

INSECTICIDE

Active ingredient: Thiamethoxam (neonicotinoid) 600 g/ℓ
(Reg. No. L9110, Act 36 of 1947)

A systemic insecticide seed treatment for the control of spotted maize beetle *(Astylus atromaculatus)* larvae, black maize beetle *(Heteronychus arator)*, false wire worms *(Tenebrionidae spp.),* ground weevils *(Protostrophus spp.)* and maize leafhopper *(Cicadulina mbila)*.

Features

- SORENTO 600 FS is an IRAC group 4A insecticide.
- Systemic insecticide as a seed treatment.
- Acropetal translocation.
- Contact and stomach action.
- Stable formulation on seed.
- Controls various important soil borne insects.

Do's and don'ts

- Only use SORENTO 600 FS for the treatment of high quality certified seed.
- Do not use SORENTO 600 FS on sweetcorn or popcorn.
- Take care not to damage seed during treatment.
- Only use treated seed for planting purposes and not for consumption or animal feed.
- Store treated seed in a cool dry place.

USE RATE†

- **Spotted maize beetle larvae, black maize beetle, false fire worms and ground weevils:** 0.5 mg active ingredient per kernel (2 parts water to one part SORENTO 600 FS)
- **Maize leafhopper:** 0.85 mg active ingredient per kernel (the volume of water to be added must be such that a final mixture volume of 1.5 ℓ is used per 100 kg of seed)
- NB The expected period of control after planting seed treated with SORENTO 600 FS is 42 days

REGISTRATION DETAILS†
SORENTO 600 FS
Active ingredient: Thiamethoxam (neonicotinoid) 600 g/ℓ
(Reg. No. L9110 Act 36 of 1947)

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HERBICIDE

Trade name	Active Ingriedient	Target Species
2,4-D AMINE SOLUBLE	2,4-D phenoxy compound	Broad-leaf weeds
ACETOCHLOR 900 EC	acetochlor	Annual grasses & certain broad-leaf weeds
AGRIZINE 500 SC	atrazine + other triazines	Annual broad-leaf weeds
BOUND 200 SL	glusfosinate-ammonium	Annual weeds
BRENNO 700 SC	acetochlor + atrazine + terbuthylazine	Annual grasses & broad-leaf weeds
CAMPATOP 225 EC	bromoxynil	Broad-leaf weeds
CANTRON® 480 SC	mesotrione	Annual grasses & broad-leaf weeds
CORVETTE 425 SC	atrazine + sulcotrione	Annual broad-leaf weeds
EPTC PLUS 720 EC	EPTC + dichlormid (safener)	Nutsedge, annual grasses & certain broad-leaf weeds
FLUMETSULAM 800 WDG / LAUREL 800 WDG	flumetsulam (triazolopyrimidine sulfoanilide)	Annual grasses & broad-leaf weeds
GLYGRAN 710 SG / SLASH 710 SG	glyphosate (glyphosate ammonium salt)	Annual & perennial weeds
GRANTRON 750 WDG	mesotrione	Annual grasses & broad-leaf weeds
HALO 750 WDG	halosulfuron	Nutsedge & broad-leaf
HORNET 480 SL	bendioxide	Nutsedge, broad-leaf & yellow nutsedge.
LEAP 840 EC	acetochlor + benoxacor	Annual grasses, broad-leaf weeds & suppression of yellow nutsedge
LOTUS 480 SL	dicamba (dimethyl amine salt	Broad-leaf weeds
MCPA 400 SL	MCPA	Broad-leafweeds
METOLACHLOR 915 EC	metolachlor + benoxacor	Annual grasses, broad-leaf weeds & suppression of yellow nutsedge

↑ **Click on product links above to get to more information on this product.**

NEXT PAGE

HERBICIDE

Trade name	Active Ingriedient	Target Species
METOLACHLOR 960 EC	metolachlor	Annual grasses, broad-leaf weeds & suppression of yellow nutsedge
NICORON 750 WDG	nicosulfuron	Grass & broad-leaf weeds
PALLADIUM 960 EC	s-metolachlor	Annual & broad-leaf weeds
PALLADIUM PLUS 915 EC	s-metolachlor + benoxacor	Annual grasses, broad-leaf weeds & suppression of yellow nutsedge
PALLADIUM ULTRA 660 SC	Atrazine + S-metolachlor + benoxacor	Annual grasses, broad-leaf weeds & suppression of yellow nutsedge
SERIES 240 EC	Clethodim	Grass weeds & volunteer glyphosate tolerant maize
SLASH PLUS 540 SL/ PANGA PLUS 54 SL	glyphosate (glyphosate potassium salt)	Annual & perennial weeds
TERBUCIDE PLUS 900 WDG	terbuthylazine + atrazine	Annual broad-leaf weeds
TERBUSIEN SUPER 600 SC	atrazine + terbuthylazine + related active triazines	Annual broad-leaf weeds
TERBUWEED 600 WDG	terbuthylazine	Annual broad-leaf weeds
TETRAMET SC	atrazine + terbuthylazine + metolachlor + benoxacor	Annual grasses, broad-leaf weeds & suppression of yellow nutsedge

↑ **Click on product links above to get to more information on this product.**

2,4-D AMINE SOLUBLE

HERBICIDE

Active ingredient: (2,4-dichlorophenoxy) acetic acid 800 g/kg
(as the 2,4-D-dimethylammonium salt 969 g/kg)
(Reg. No. L6207 Act 36 of 1947)

Water-soluble granules. A dry, highly concentrated water-soluble formulation for the selective control of mainly broad-leaf weeds on maize.

Photo 1. Common pigweed (Amaranthus hybridus)
Photo 2. Common blackjack (Bidens pilosa)
Photo 3. Thorn apple (Datura stramonium)
Photo 4. Cocklebur (Xanthiium strumarium)

Features

- 2,4-D AMINE SOLUBLE is an HRAC group code O herbicide.
- Contains a phenoxy herbicide.
- Controls wandering jew as well as white goosefoot.
- Registered for aerial application.
- Grass weeds already emerged will not be controlled.

Do's and don'ts

- Do not acidify the spray mixture by adding buffers or acidifiers as this may result in precipitation of the active ingredient.
- As factors influencing compatibility may vary, a physical compatibility test must always be performed before such tank mixture is sprayed.
- In the case of tank mixtures, first add the 2,4-D AMINE SOLUBLE solution followed by the complimentary product(s). Important, always add emulsifiable formulations (e.g. EC/EW), surfactants or oils last to the tank.
- Apply in a minimum of 200 litres water per hectare.
- Use low pressure anti-drift type flat fan nozzles .
- Do not exceed a spray pressure of 200 kPa.
- Do not apply this product by air in Kwa-Zulu Natal.
- *Striga asiatica* (witchweed) should be sprayed when first flowers are noticed.
- Maize may become brittle and malformed after application, but this is usually of a temporary nature.
- Use drop arms for directed spraying, to ensure that the spray does not land in the funnel of maize plants as this may cause damage to the crop.

USE RATE†
- 1 kg/ha . Apply when crop is 45 cm tall.

REGISTRATION DETAILS†
2,4-D AMINE SOLUBLE
Active ingredient: 2,4-dichlorophenoxy acetic acid 800 g/kg (as the 2,4-D-dimethylammonium salt 969 g/kg)
(Reg. No. L6207 Act 36 of 1947)
(harmful)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
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PACKAGING
1.5 kg

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WINFIELD® UNITED

ACETOCHLOR 900 EC

HERBICIDE

Active ingredient: Acetochlor (chloroacetanilide) 900 g/ℓ
(Reg. No. L7633 Act 36 of 1947)

A pre-emergence emulsifiable concentrate herbicide for the control of most annual grasses, certain broad-leaved weeds and yellow nutsedge *(Cyperus esculentus)* in maize.




Features

- ACETOCHLOR 900 EC is an HRAC group K3 herbicide.
- Pre-emergence, selective herbicide.
- Absorbed by hypocotyls of germinating grasses and roots of broad-leaf weeds.
- Compatible with several broad leaf herbicides.
- Good pre-emergence control of grasses.
- Safe for maize post-emergence.
- Suppression of *Cyperus spp.*
- Has low leaching potential in most soils.
- Not volatile.
- Generally provides 8-12 weeks of weed control but this may vary depending on soil characteristics and weather conditions.

USE RATE†
- 0,6 ℓ – 1.8 ℓ depending on soil clay % and tank mixing partners
- Refer to label for specific recommendations

REGISTRATION DETAILS†
ACETOCHLOR 900 EC
Active ingredient: Acetochlor (chloroacetanilide) 900 g/ℓ
(Reg. No. L7633 Act 36 of 1947)
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
10 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

ACETOCHLOR 900 EC

HERBICIDE

Active ingredient: Acetochlor (chloroacetanilide) 900 g/ℓ
(Reg. No. L7633 Act 36 of 1947)

A pre-emergence emulsifiable concentrate herbicide for the control of most annual grasses, certain broad-leaved weeds and yellow nutsedge *(Cyperus esculentus)* in maize.

Do's and don'ts

- Only apply post-emergence of maize.
- Use in conjunction with a broad-leaf herbicide.
- Does not control grasses post-emergence.
- Do not use pre- emergence on maize use only acetochlor with a safener for pre- emergent applications.

USE RATE†
- 0,6 ℓ – 1.8 ℓ depending on soil clay % and tank mixing partners
- Refer to label for specific recommendations

REGISTRATION DETAILS†
ACETOCHLOR 900 EC
Active ingredient: Acetochlor (chloroacetanilide) 900 g/ℓ
(Reg. No. L7633 Act 36 of 1947)
(caution)

Registration holder:
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PACKAGING
10 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

AGRIZINE 500 SC

HERBICIDE

Active ingredient: Atrazine (triazine) 488 g/ℓ; other triazines 12 g/ℓ
(Reg. No. L5387 Act 36 of 1947)

A suspension concentrate herbicide for the control of annual broad-leaved weeds and certain grasses in maize.




Photo 1. Upright starbur (Acanthospermum hispidum)
Photo 2. White goosefoot (Chenopodium album)
Photo 3. Bladder Hibiscus (Hibiscus trionum)
Photo 4. Single-leaved Cleome (Cleome monophyla)

Features

- AGRIZINE 500 SC is an HRAC group C1 herbicide.
- AGRIZINE 500 SC can be applied either pre- or post-emergence to maize.
- AGRIZINE 500 SC is effective when applied both pre- and post-emergence against most broad-leaf weeds.
- Compatible with several grass and broad-leaf herbicides for wider spectrum weed control.

Do's and don'ts

- Take note of carry-over risk in crop rotation systems, specifically on sandy soils.
- Do not tank mix with glyphosate containing products as the atrazine is incompatible with the glyphosate.
- High pH soil or soil that has been limed will increase the risk of carry-over to sensitive crops.
- Not recommended on soils exceeding 40% clay content.
- AGRIZINE 500 SC can only be applied post-emergence if broad-leaf weeds have not developed beyond the 2-leaf stage.
- Do not apply AGRIZINE 500 SC to inbred parent plants of maize.

USE RATE†
- Apply AGRIZINE 500 SC pre-emergence or post-emergence of the maize crop and of weed emergence, to control a wide spectrum of broadleaved weeds.

Dosage Rates:
- 2.5l - 5 ℓ/ha depending on soil clay %.
- Refer to the label for specific dosage rates, mixture partners and weeds controlled.

REGISTRATION DETAILS†
AGRIZINE 500 SC
Active ingredient: Atrazine (triazine) 488 g/ℓ; other triazines 12 g/ℓ (Reg. No. L5387 Act 36 of 1947) (harmful)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

PACKAGING
20 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

BOUND 200 SL

HERBICIDE

Active ingredient: Glufosinate-ammonium 200 g/ℓ
(Reg. No. L9280, Act 36 of 1947)

A non-selective soluble concentrate herbicide with contact action, for the post-emergence control of annual weeds.




Features

- BOUND 200 SL is a Phosphinic acid group herbicide and belongs to HRAC Group H.
- Kills the weed by inhibiting an enzyme central to the plant's metabolism.
- Contact herbicide with limited translocation in the plant.
- BOUND 200 SL is active on all the green parts of the treated weeds.
- Chlorosis and wilting occur within 3-5 days after application followed by death 1-2 weeks later.
- BOUND 200 SL is useful for controlling glyphosate resistant weeds such as *Lolium spp*. and *Conyza spp*.
- Control of hard to kill weeds such as:
  - *Malva parviflora*: small mallow/kiesieblaar.
  - *Conyza bonariensis:* flax-leaf fleabane/vaalskraalhans.
  - *Lolium spp.*: rye grass /raaigras.
  - *Cynodon dactylon:* common couch grass /kweekgras.

Do's and don'ts

- Do not spray vines younger than two years unless stems are shielded.
- Start with application in late winter or early spring.
- Commence spraying before bud burst in bush and low trellised vines.
- Ensure that direct spray or drift does not come into contact with green leaves, active buds and fruit.
- Ensure thorough coverage of the weed foliage.

USE RATE†
- 5 – 7.5 ℓ/ha

REGISTRATION DETAILS†
BOUND 200 SL
Active ingredient: glufosinate-ammonium 200 g/ℓ
(Reg. No. L9280 Act 36 of 1947)
(harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Co. Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630
Tel: 011 396 2233

PACKAGING
5 ℓ

ALWAYS READ THE LABEL

BRENNO 700 SC

HERBICIDE

Active ingredient: acetochlor (chloroacetanilide) 250 g/ℓ, atrazine (triazine) 225 g/ℓ, terbuthylazine (triazine) 225 g/ℓ, benoxacor 13g/ℓ
(Reg. No. L8391 Act 36 of 1947)

A suspension concentrate herbicide with benoxacor as safener for the control of most annual grasses and certain broadleaf weeds in maize.




Photo 1: Amaranthus hybridus
Photo 2: Cyperus esculentus
Photo 3: Datura stramonium
Photo 4: Digitaria sanguinalis

Features

- BRENNO 700 SC is an HRAC Group code C1 (triazine) and K3 (chloroacetanilide) herbicide.
- BRENNO 700 SC is used pre- and early post- emergence for selective control of most annual grasses and broad-leaf weeds in maize.
- Can be tank mixed with LEAP 840 EC and CANTRON 480 SC for control of a wider range of weeds.

Do's and don'ts

- Apply BRENNO 700 SC or its tank mixtures as a pre-emergence application at planting or immediately after planting of maize crop, but not later than (3) three days after planting.
- Apply early post-emergence when broad-leaf weeds are not bigger that the 4-leaf stage.
- If grass weeds are present, first destroy the weeds by means of a cultivation.
- Do not apply BRENNO 700 SC to inbred parent plants of maize hybrids nor onto experimental or newly released cultivars.
- Do not apply BRENNO 700 SC to poorly drained soils or soils with a compaction layer.
- Heavy rain (25 mm per day or 50 mm over a 3- to 7-day period) on very sandy soils (< 15 % clay), low in organic matter (< 1 %), can reduce weed control.
- For optimum control of *Cyperus esculentus* and *Digitaria sanguinalis* use in a tank mixture with LEAP 840 EC at 800 mℓ/ha.

USE RATE†
- 1.8ℓ to 5ℓ/ha. Refer to label for dosage recommendations with tank mix partners and for detailed recommendations according to soil type.

REGISTRATION DETAILS†
BRENNO 700 SC
Active ingredient: acetochlor (chloroacetanilide) 250 g/ℓ, atrazine (triazine) 225 g/ℓ, terbuthylazine (triazine) 225 g/ℓ, benoxacor 13g/ℓ
(Reg. No. L8391 Act 36 of 1947)
(harmful)

CANTRON 480 SC
Active ingredient: Mesotrione (callistemone) 480 g/ℓ
(Reg. No. L8365 Act 36 of 1947)
(caution)

LEAP 840 EC
Active ingredient: acetochlor (chloroacetanilide) 840 g/ℓ & benoxacor (safener) 49 g/ ℓ
Reg. No. L 8064 Act 36 of 1947
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
20 ℓ

CAMPATOP® 225 EC

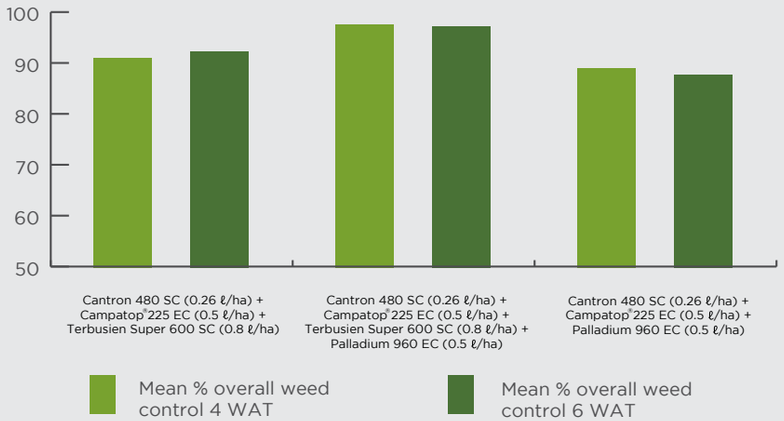
HERBICIDE

Active ingredient: Bromoxynil as the octanoate (nitrile) 225 g/ℓ
(Reg. No. L5320 Act 36 of 1947)

A selective emulsifiable concentrate herbicide for the post-emergence control of annual broad-leaved weeds in maize.




Summary of a trial showing the performance of CAMPATOP® in different tank-mixtures applied post-emergent. The graphs shows the mean percentage overall weed control of 7 weeds present.



USE RATE†
- Refer to CANTRON 480 SC label for specific CAMPATOP® 225 EC tank-mix recommendation.
- Apply 1.5 - 2.0 ℓ/ha CAMPATOP® 225 EC

or
- 1.0 ℓ/ha CAMPATOP® 225 EC in combination with 1.0 - 2.0 ℓ/ha ATRAZINE 500 SC.

or
- 1.5 ℓ/ha CAMPATOP® 225 EC in combination with 1.0 ℓ/ha MCPA 400 SL (potassium salt).

REGISTRATION DETAILS†
CAMPATOP® 225 EC
Active ingredient: Bromoxynil as the octanoate (nitrile) 225 g/ℓ
(Reg. No. L5320 Act 36 of 1947)

CANTRON 480 SC
Active ingredient: Mesotrione (callistemone) 480 g/ℓ
(Reg. No. L8365 Act 36 of 1947)

MCPA 400 SL
Active ingredient: (4-chloro-2-methylphenoxy) acetic acid 400 g/ℓ (as the phenoxy acetic salt) (potassium salt) 470 g/ℓ
(Reg. No. L5793 Act 36 of 1947) (harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
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ALWAYS READ THE LABEL

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WINFIELD® UNITED

CAMPATOP® 225 EC

HERBICIDE

Active ingredient: Bromoxynil as the octanoate (nitrile) 225 g/ℓ
(Reg. No. L5320 Act 36 of 1947)

A selective emulsifiable concentrate herbicide for the post-emergence control of annual broad-leaved weeds in maize.

Features

- CAMPATOP® 225 EC is an HRAC Group C3 herbicide.
- Has some systemic activity.
- Post-emergence control of annual broad-leaf weeds.
- Used in combination with other herbicides, to extend the spectrum of control.
- Good tank-mixing partner with broad-leaf and grass herbicides.

Do's and don'ts

- Apply when weeds are fully germinated but not older than the 6- leaf stage.
- Apply CAMPATOP® 225 EC only when weather conditions favour active growth of weeds.
- The use of CAMPATOP® 225 EC in combination with wetting agents is not advisable as this may lead to crop damage.
- Do not apply to maize younger than the 4-leaf stage.
- Irrigation should be withheld for 48 hours after application.

USE RATE†
- Refer to CANTRON 480 SC label for specific CAMPATOP® 225 EC tank-mix recommendation.
- Apply 1.5 - 2.0 ℓ/ha CAMPATOP® 225 EC

or
- 1.0 ℓ/ha CAMPATOP® 225 EC in combination with 1.0 - 2.0 ℓ/ha ATRAZINE 500 SC.

or
- 1.5 ℓ/ha CAMPATOP® 225 EC in combination with 1.0 ℓ/ha MCPA 400 SL (potassium salt).

REGISTRATION DETAILS†
CAMPATOP® 225 EC
Active ingredient: Bromoxynil as the octanoate (nitrile) 225 g/ℓ
(Reg. No. L5320 Act 36 of 1947)

CANTRON 480 SC
Active ingredient: Mesotrione (callistemone) 480 g/ℓ
(Reg. No. L8365 Act 36 of 1947)

MCPA 400 SL
Active ingredient: (4-chloro-2-methylphenoxy) acetic acid 400 g/ℓ
(as the phenoxy acetic salt) (potassium salt) 470 g/ℓ
(Reg. No. L5793 Act 36 of 1947) (harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
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PACKAGING
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WINFIELD® UNITED

CANTRON 480 SC

HERBICIDE

Active ingredient: Mesotrione (callistemone) 480 g/ℓ
(Reg. No. L8365 Act 36 of 1947)

A suspension concentrate herbicide for the control of weeds in maize.




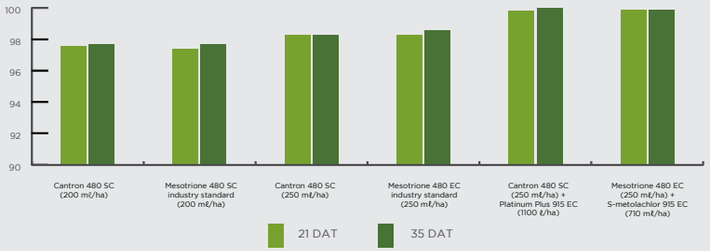

Fig 1: The summary of 2 trials showing the mean percentage overall weed control (5 different weeds) obtained by a pre-emergent application of CANTRON 480 SC.
*** 0.1% Villa 51 surfactant added to all treatments*

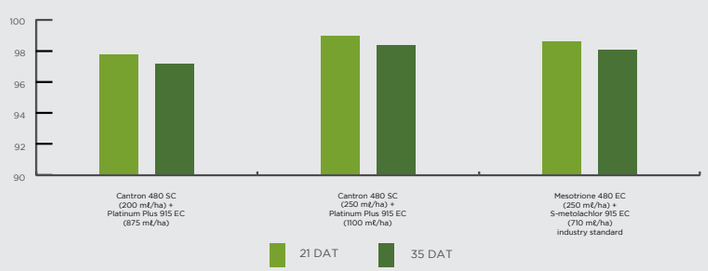

Fig 2: The summary of 2 trials showing the mean percentage overall weed control (5 different weeds) obtained by a post-emergent application of CANTRON 480 SC.

USE RATE†
Dosage rate:
- 200 mℓ – 260 mℓ/ha
- Refer to label for dosage recommendations with tank-mix partners

REGISTRATION DETAILS†
CANTRON 480 SC
Active ingredient: Mesotrione (callistemone) 480 g/ℓ
(Reg. No. L8365 Act 36 of 1947)
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
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WINFIELD® UNITED

CANTRON 480 SC

HERBICIDE

Active ingredient: Mesotrione (callistemone) 480 g/ℓ
(Reg. No. L8365 Act 36 of 1947)

A suspension concentrate herbicide for the control of weeds in maize.

Features

- CANTRON 480 SC is an HRAC group F2 herbicide.
- Mesotrione is part of the Triketone group of herbicides which are chlorophyl inhibitors (bleachers).
- Pre- and post-emergence application.
- Foliar and root uptake with basipetal and acropetal translocation.
- Controls a wide spectrum of broad-leaf weeds, certain grass weeds and suppression of nutgrass.
- Low dosage rates with high efficacy.
- Proven synergism in mixtures with other herbicides registered in maize.
- Good tank-mix partner enabling control of problematic weeds in maize with a range of registered mixtures.

Do's and don'ts

- Apply CANTRON 480 SC pre- emergence at planting or immediately after planting (not longer than 3 days after planting).
- 10 to 20 mm rain within 7 to 10 days after application is necessary for good results.
- Do not apply post- emergence within 4 weeks, on maize treated at planting with an organophosphate or carbamate insecticide.
- Do not tank-mix with an organophosphate or carbamate insecticide.
- Do not apply a foliar application of an organophosphate or carbamate insecticide within 1 week before or after a CANTRON 480 SC application.
- Do not apply products containing the active ingredients flumetsulam or imazethapyr in dry beans if CANTRON 480 SC was applied to the same field the previous season.

USE RATE†
Dosage rate:
- 200 mℓ – 260 mℓ/ha
- Refer to label for dosage recommendations with tank-mix partners

REGISTRATION DETAILS†
CANTRON 480 SC
Active ingredient: Mesotrione (callistemone) 480 g/ℓ
(Reg. No. L8365 Act 36 of 1947)
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
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Tel. (011) 396-2233

PACKAGING
5 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

CORVETTE 425 SC

HERBICIDE

Active ingredient: Atrazine (triazine) 300g/ℓ & sulcotrione (triketone) 125g/ℓ
(Reg. No. L8323 Act 36 of 1947)

A suspension concentrate herbicide for selective control of most annual broad-leaf weeds as well as goose grass *(Eleusine indica)* in maize.




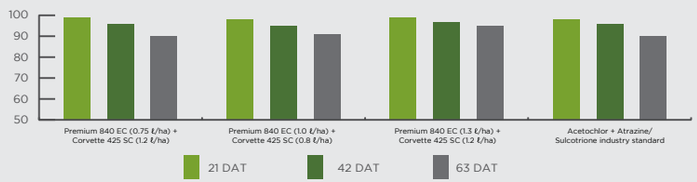

Fig 1: Summary of 2 trials showing the performance of CORVETTE 425 SC for the control of a number of weeds when applied pre-emergence (pre-plant of crop) as part of various tank mixtures with acetochlor. Graph shows the mean percentage overall weed control.

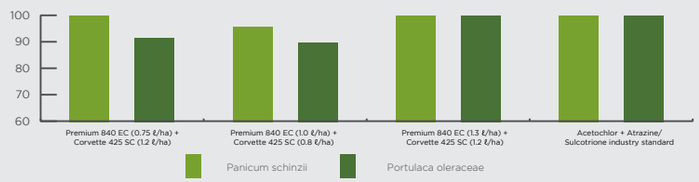

Fig 2: Summary of a trial showing the performance of CORVETTE 425 SC, when applied pre-emergence in tank mixes with acetochlor, for the control of 2 notoriously tough weeds.

USE RATE†
Dosage rate:
- 0.8 ℓ – 1.4 ℓ/ha
- Refer to label for recommended dosage rates with tank-mix partners and soil clay percentages.

REGISTRATION DETAILS†
CORVETTE 425 SC
Active ingredient: Atrazine (triazine) 300 g/ℓ & sulcotrione (triketone) 125 g/ℓ
(Reg. No. L8323 Act 36 of 1947)
(harmful)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

PACKAGING
10 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

HERBICIDE

CORVETTE 425 SC

Active ingredient: Atrazine (triazine) 300g/ℓ & sulcotrione (triketone) 125g/ℓ
(Reg. No. L8323 Act 36 of 1947)

A suspension concentrate herbicide for selective control of most annual broad-leaf weeds as well as goose grass *(Eleusine indica)* in maize.

Features

- CORVETTE 425 SC is an HRAC Group C1/F2 herbicide.
- Selective systemic herbicide.
- Pre- and post-emergence.
- Two active ingredients.
- Absorbed by the roots and leaves.
- Apical translocation.
- Compatible with numerous grass & broad-leaf herbicides.
- Two active ingredients offer excellent broad-leaf weed control.
- Controls a wide range of grasses & broad-leaf weeds.
- Excellent for weed control in seed maize.

Do's and don'ts

- Not glyphosate compatible due to atrazine content.
- The addition of VILLA 51 at a rate of 100 mℓ/100 ℓ is recommended when CORVETTE 425 SC is applied post-emergence.
- CORVETTE 425 SC can be applied to all currently planted maize cultivars.
- CORVETTE 425 SC can be applied to certain sweetcorn cultivars. See label for the list.
- The crop must be at least in the 4-leaf stage during a post-emergent application.
- Pre-emergent application: Apply during or immediately after planting on to a well prepared seedbed.
- Chlorosis may occur in very cold or wet conditions during application. But this will not affect the yield.
- Optimal weed control is obtained when application is followed by at least 10-20 mm of soft penetrating rain or irrigation within 7-10 days of application.
- Post-emergence: CORVETTE 425 SC can be applied post-emergence provided that the broad-leaf weeds are in the correct growth stage.

USE RATE†
Dosage rate:
- 0.8 ℓ – 1.4 ℓ/ha
- Refer to label for recommended dosage rates with tank-mix partners and soil clay percentages.

REGISTRATION DETAILS†
CORVETTE 425 SC
Active ingredient: Atrazine (triazine) 300 g/ℓ & sulcotrione (triketone) 125 g/ℓ
(Reg. No. L8323 Act 36 of 1947)
(harmful)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

PACKAGING
10 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

EPTC PLUS 720 EC

HERBICIDE

Active ingredient: EPTC (thiocarbamate) 720g/ℓ &
dichlormid (safener) 76 g/ℓ
(Reg. No. L 4504, Act 36 of 1947)

An emulsifiable concentrate herbicide with dichlormid, which must be incorporated into the soil, for the control of nutsedges, annual grasses and certain broad-leaf weeds in maize.




Photo 1. Yellow nutsedge(Cyperus esculentus)
Photo 2. Purple nutsedge (Cyperus rotundus)
Photo 3. Crabfinger grass (Digitaria sanguinalis)
Photo 4. Goose grass (Eleusine indica)

Features

- EPTC PLUS 720 EC is an HRAC Group N herbicide.
- Volatile, readily lost if not incorporated in to the soil immediately.
- Absorbed by roots and shoots of germinating weeds.
- Compatible with numerous herbicides.
- Contains dichlormid as safener for maize.
- Stops weeds from germinating.
- Exerts its action through inhibition of cuticle formation at early stages of seedling growth.
- Very safe to be used for weed control in maize.

Do's and don'ts

- Not recommended on soil with a clay content of more than 30%.
- Sowing can take place immediately after application if used as a stand alone product.
- Do not use on seed maize before consulting the supplier.
- Ensure that herbicide is thoroughly mixed with top 10-15cm of soil immediately after application.

USE RATE†
- 2-4 ℓ depending on the percentage soil clay content.
- Refer to label for dosage recommendations and tank mix partners.

REGISTRATION DETAILS†
EPTC PLUS 720 EC
Active ingredient: EPTC (thiocarbamate) 720 g/ℓ & dichlormid (safener) 76 g/ℓ
Reg. No. L 4504 Act 36 of 1947
(Harmful)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

PACKAGING
20 ℓ

ALWAYS READ THE LABEL

FLUMETSULAM 800 WDG /LAUREL 800 WDG

HERBICIDE

Active ingredient: Flumetsulam (triazolopyrimidine sulfoanilide) 800 g/kg (Reg. No. L8062, (FLUMETSULAM 800 WDG), L8061 (LAUREL 800 WDG), Act 36 of 1947)

A water dispersible granule herbicide for use in a tank mixture for pre-emergence and post-emergence control of broad-leaf weeds in maize.

Photo 1. Chenopodium carinatum
Photo 2. Chenopodium album
Photo 3. Portulaca oleracea
Photo 4. Tribulus terrestris

Features

- FLUMETSULAM 800 WDG /LAUREL 800 WDG is an HRAC group code B herbicide (New Group Code 2).
- A water dispersible granule herbicide for the pre- and post-emergence control of broad-leaf weeds in maize.
- FLUMETSULAM 800 WDG /LAUREL 800 WDG inhibits the enzyme acetolactate synthase (ALS inhibitor) resulting in inhibition of certain branched chain amino acids essential to plant growth.
- It is a highly selective, pre- and post- emergent herbicide.
- Highly systemic with rapid translocation throughout the weeds.
- Used in a tank mixture with CANTRON 480 SC and PALLADIUM PLUS 915 EC or LEAP 840 EC for pre-emergent control of annual grass weeds and broad-leaf weeds.

ALWAYS READ THE LABEL

Do's and don'ts

- Do not mix FLUMETSULAM 800 WDG /LAUREL 800 WDG with organophosphate insecticides or use in combination with organophosphate insecticides.
- Do not apply FLUMETSULAM 800 WDG /LAUREL 800 WDG to maize that was treated with organophosphate insecticides during planting.
- Do not apply organophosphate insecticides for 6 weeks after a FLUMETSULAM 800 WDG application.
- Do not apply FLUMETSULAM 800 WDG under cold and wet conditions.
- Do not apply FLUMETSULAM 800 WDG mixtures to sweetcorn, seed maize, popcorn or other exotic maize type cultivars.

USE RATE†
- Pre-emergent: FUMETSULAM 800 WDG 0 – 10% clay 18g or > 10 % clay 26g - in a tank mixture with CANTRON 480 SC at 210 to 260 mℓ/ha plus PALLADIUM PLUS 915 EC at 650 mℓ/ha or an alternative pre-emergent grass herbicide or LEAP 840 EC1.2/ha. (see label for details).

REGISTRATION DETAILS†
FLUMETSULAM 800 WDG
Active ingredient: Flumetsulam (triazolopyrimidine sulfoanilide) 800 g/kg
Reg. No. L8062, Act 36 of 1947 (caution)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

CANTRON 480 SC
Active ingredient: Mesotrione (callistemone) 480 g/ℓ
(Reg. No. L8365 Act 36 of 1947)
(caution)

LAUREL 800 WDG
Active ingredient: flumetsulam 800 g/kg
(triazolopyrimidine sulfoanilide)
(Reg. No. L8061 Act 36 of 1947)
(caution)
LEAP 840 EC
Active ingredient: acetochlor(chloroacetanilide) 840g/l
Reg. No. L8064. Act 36 of 1947 (caution)

PALLADIUM PLUS 915 EC
Active ingredient: s-metolachlor (chloroacetanilide) 915 g/ℓ
Reg. No. L9359 Act 36 of 1947 (harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
500g

GLYGRAN 710 SG/SLASH 710 SG

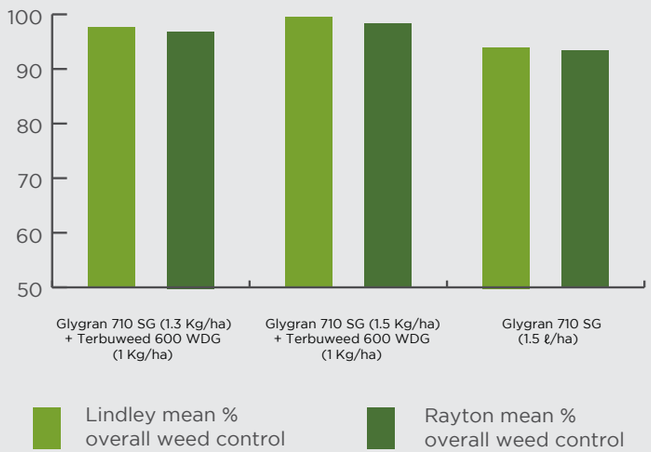
HERBICIDE

Active ingredient: glyphosate (glycine) 710 g ae/kg & glyphosate ammonium salt 780 g/kg
(Reg. No. L8449 (GLYGRAN 710 SG), L8450 (SLASH 710 SG), Act 36 of 1947)

A water soluble granule, non-selective, systemic post-emergence herbicide with slight or no soil activity, for the control of perennial and annual weeds in maize.




Summary of 2 trials showing the performance of GLYGRAN 710 SG (applied post emergence) for the control of a number of different weeds within glyphosate tolerant maize. Graphs show the mean percent overall weed control.



ALWAYS READ THE LABEL

USE RATE†
In pre-plant uses:
- Refer to label for specific recommendations per weed and growth stage

In glyphosate tolerant maize:
- Annual grasses and broad-leaf weeds - 1 kg/ha GLYGRAN 710 SG (before 8-leaf stage) and 1.5kg/ha (up to the 12-leaf stage of the weed)
- Difficult to control species requiring followup spray (variable control) - 1.5 kg/ha GLYGRAN 710 SG

(NB Consult label for each weed's exact recommendations)

REGISTRATION DETAILS†
GLYGRAN 710 SG
Active ingredient: glyphosate (glycine) 710 g ae/kg & glyphosate ammonium salt 780 g/kg
(Reg. No. L8449 Act 36 of 1947)
(caution)

VELOCITY-DRYMAX
Active ingredient: Ammonium sulphate 1000 g/kg
(Reg. No. L9454 Act 36 of 1947)
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

SLASH 710 SG
Active ingredient: Glyphosate (glycine) 710 ae/kg + (glyphosate ammonium salt) 780 g/kg
(Reg. No. L8450 Act 36 of 1947)
(caution)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

PACKAGING
10 kg

GLYGRAN 710 SG/SLASH 710 SG

HERBICIDE

Active ingredient: glyphosate (glycine) 710 g ae/kg & glyphosate ammonium salt 780 g/kg
(Reg. No. L8449 (GLYGRAN 710 SG), L8450 (SLASH 710 SG), Act 36 of 1947)

A water soluble granule, non-selective, systemic post-emergence herbicide with slight or no soil activity, for the control of perennial and annual weeds in maize.

Features

- GLYGRAN 710 SG is an HRAC group code G9 herbicide.
- Provides control of both annual and perennial grass and broad-leaf weeds.
- Uptake (absorption) is fast and cultivation, planting or other soil preparation practices can take place the day after application.
- On contact with the soil, glyphosate binds to the clay particles and is decomposed over time by the soil microbes.
- The product has no soil residual effect, therefore has no root uptake and is safe to follow-up crops after application.
- Wilting of weeds will be visible within the first week after application on annual weeds and total death occurs 14-21 days after application.
- Rain fast one hour after application on small actively growing annual weeds.
- Registered for use on glyphosate tolerant crops.
- Granules easily dissolve in the spray mixture and hardly any dust is visible.
- Granular bags are easy to handle, transport and use less storage space than liquids.
- Due to its high load of glyphosate active, more hectares can be sprayed with fewer containers than the equivalent liquid formulations.

Do's and don'ts

- Always use clean water, free of mud or organic material.
- For optimum results, always apply product on actively growing, stress free weeds.
- Avoid applications during high temperatures and when humidity is low.
- Do not spray weeds covered with dust.
- Apply the product at a minimum volume rate of 125 liters spray mixture per hectare.
- The addition of ammonium sulphate (VELOCITY DRY-MAX) to spray mixture is recommended for effective weed control.
- For optimum and consistent results, it's recommended to add a non-ionic surfactant at 0.5% solution to the spray volume.
- Always fill the tank half full with water before adding any chemicals to the spray mixture and keep on agitating mixture while adding products.
- Slowly add granules to the spray mix to allow product to dissolve properly.

USE RATE†
In pre-plant uses:
- Refer to label for specific recommendations per weed and growth stage

In glyphosate tolerant maize:
- Annual grasses and broad-leaf weeds - 1 kg/ha GLYGRAN 710 SG (before 8-leaf stage) and 1.5kg/ha (up to the 12-leaf stage of the weed)
- Difficult to control species requiring followup spray (variable control) - 1.5 kg/ha GLYGRAN 710 SG

(NB Consult label for each weed's exact recommendations)

REGISTRATION DETAILS†
GLYGRAN 710 SG
Active ingredient: glyphosate (glycine) 710 g ae/kg & glyphosate ammonium salt 780 g/kg
(Reg. No. L8449 Act 36 of 1947)
(caution)

VELOCITY-DRYMAX
Active ingredient: Ammonium sulphate 1000 g/kg
(Reg. No. L9454 Act 36 of 1947)
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

SLASH 710 SG
Active ingredient: Glyphosate (glycine) 710 ae/kg + (glyphosate ammonium salt) 780 g/kg
(Reg. No. L8450 Act 36 of 1947)
(caution)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

PACKAGING
10 kg

ALWAYS READ THE LABEL

GRANTRON 750 WDG

HERBICIDE

Active ingredient: Mesotrione (callistemone) 750 g/ℓ
(Reg. No. L 10706, Act 36 of 1947)

A water dispersible granule herbicide for the control of weeds in maize.

Photo 1. Large thorn apple (Datura ferox)
Photo 2. Common pigweed (Amaranthus hybridus)
Photo 3. Dwarf marigold (Schkuhria pinnata)
Photo 4. White goosefoot (Chenopodium album)

Features

- GRANTRON 750 WDG is an HRAC group code F2 herbicide.
- Mesotrione is part of the Triketone group.
- Pre- and post-emergence application.
- Foliar and root uptake with basipetal and acropetal translocation.
- Provides a broad spectrum of broad-leaf weed control.
- Good tank mix partner.
- Chlorophyl inhibitor – bleacher.
- Low dosage rates with high efficacy.
- Compatible with a wide range of herbicides for synergistic enhancement.

Do's and don'ts

- Pre-emergent: apply GRANTRON 750 WDG at planting or immediately after planting (not longer than 3 days after planting).
- 10-20mm rain within 7-10 days after application is necessary for good results.
- Do not apply post-emergence within 4 weeks of an organophosphate or carbamate soil applied insecticide planting.
- Do not apply foliar application of an organophosphate or carbamate insecticide within 1 week before or after a GRANTRON 750 WDG application.
- Do not apply products containing flumetsulam or imazethapyr in dry beans if GRANTRON 750 WDG was applied in the same field the previous season.

USE RATE†
- 165 g/ha
- Refer to label for dosage recommendations with tank mix partners.

REGISTRATION DETAILS†
GRANTRON 750 WDG
Active ingredient: Mesotrione (callistemone) 750 g/ℓ
Reg. No. L 10706 Act 36 of 1947 (caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
1.65 kg

ALWAYS READ THE LABEL

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WINFIELD® UNITED

HALO 750 WDG

HERBICIDE

Active ingredient: Halosulfuron (sulfonylurea) 750 g/kg
(Reg. No. L8283, Act 36 of 1947)

A selective water dispersible granular herbicide packed in water-soluble bags for the post-emergence control of nutsedge and certain broad-leaf weeds in maize.




Photo 1. Yellow nutsedge (Cyperus esculentus)
Photo 2. Purple nutsedge (Cyperus rotundus)
Photo 3. Khakiweed (Tagetes minuta)
Photo 4. Common blackjack (Bidens pilosa)

Features

- HALO 750 WDG is an HRAC group B herbicide *(sulfonylurea).*
- Sulfonlyurea herbicides act by inhibiting acetolactate synthase, thereby blocking the biosynthesis of the branched-chain amino acids valine, leucine and isoleucine.
- HALO 750 WDG is a systemic, post emergent herbicide - absorbed mainly by leaves.
- Controls yellow and purple nutsedge *(Cyperus esculentus and Cyperus rotundus)* and certain broad-leaf weeds.
- HALO 750 WDG is compatible with a wide range of Villa herbicides and adjuvants used in maize.
- HALO 750 WDG is a stable, high load WDG formulation packed in water-soluble bags.
- Water soluble bags enable very accurate measurement.

USE RATE†
- 50 g/ha (Refer to label for specific dosage rates with tank-mix partners)
- Apply in 200-400ℓ water per hectare (Ground Application)
- Apply HALO 750 WDG alone, or as a tank-mixture, 3 to 5 weeks after planting of the maize
- For improved consistency: Add Villa 51 at 0.1 % v/v (100 mℓ per 100 litres water) or Summit Super at 0.15 to 0.3 % v/v (150 ml to 300 mℓ per 100 litres water) to the spray mixture as adjuvant.

REGISTRATION DETAILS†
HALO 750 WDG
Active ingredient: Halosulfuron (sulfonylurea) 750 g/kg
(Reg. No. L8283 Act 36 of 1947)
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Co. Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630
Tel: 011 396 2233

PACKAGING
5 x 50g water-soluble bags

ALWAYS READ THE LABEL

HALO 750 WDG

HERBICIDE

Active ingredient: Halosulfuron (sulfonylurea) 750 g/kg
(Reg. No. L8283 Act 36 of 1947)

A selective water dispersible granular herbicide packed in water-soluble bags for the post-emergence control of nutsedge and certain broad-leaf weeds in maize.

Do's and don'ts

- Apply after the majority of the nutsedges have germinated but before flowering.
- Nutsedge *(Cyperus spp.)* is not controlled by HALO 750 WDG pre-emergence.
- The control of late germinating nutsedge may require a second application.
- Do not apply after the 4-leaf stage or 100 mm in height of broad-leaf weeds.
- Do not use on any sweetcorn or super sweetcorn cultivars.
- Do not apply as a pre-plant application in maize (waiting period 30 days)
- Do not reduce the pH of the spray solution by adding a buffer.
- Do not use HALO 750 WDG on soils with a pH (H_2O) of 7 or higher, and/or on soils containing free lime.
- HALO 750 WDG is not recommended for the control of *Cyperus rotundus* (Purple nutsedge) under dryland conditions in the North Western Province.

USE RATE†
- 50 g/ha (Refer to label for specific dosage rates with tank-mix partners)
- Apply in 200-400ℓ water per hectare (Ground Application)
- Apply HALO 750 WDG alone, or as a tank-mixture, 3 to 5 weeks after planting of the maize
- For improved consistency: Add Villa 51 at 0.1 % v/v (100 mℓ per 100 litres water) or Summit Super at 0.15 to 0.3 % v/v (150 ml to 300 mℓ per 100 litres water) to the spray mixture as adjuvant.

REGISTRATION DETAILS†
HALO 750 WDG
Active ingredient: Halosulfuron (sulfonylurea) 750 g/kg
(Reg. No. L8283 Act 36 of 1947)
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Co. Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630
Tel: 011 396 2233

PACKAGING
5 x 50g water-soluble bags

ALWAYS READ THE LABEL

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WINFIELD® UNITED

HORNET 480 SL

HERBICIDE

Active ingredient: bendioxide (thiadiazine) 480 g/ℓ
(Reg. No. L7708 Act 36 of 1947)

A selective contact soluble liquid herbicide for the post-emergence control of certain annual broad-leaved weeds and yellow nutsedge in maize.




Photo 1. Yellow nutsedge (Cyperus esculentus)
Photo 2. White goosefoot (Chenopodium album)
Photo 3. Purslane (Portulaca oleracea)
Photo 4. Wild gooseberry (Physalis angulata)

Features

- Yellow nutsedge *(Cyperus esculentus)* that have emerged can be controlled if the following favourable conditions existed before and during application: warm, humid weather (relative humidity above 65 %) and sufficient soil moisture.
- HORNET 480 SL is compatible with AGRIZINE 500 SC, CANTRON® 480 SC, TERBUWEED 600 WDG, TERBUSIEN SUPER 600 SC and Villa Adjuvants.

Do's and don'ts

- If frost or very cold temperatures occur, or are expected, it is advised not to apply HORNET 480 SL since the crop may be harmed.
- Good coverage of the weeds is essential since HORNET 480 SL is a contact herbicide.
- Rain or irrigation within 8 hours after application may adversely affect the effectiveness of the HORNET 480 SL treatment.
- Apply HORNET 480 SL in a minimum of 300 litres water per hectare. Use flat fan or hollow cone nozzles.
- Ensure that the application is made after the majority of nutsedge have germinated, but before flowering.

USE RATE†
- 2 to 3 ℓ / ha. HORNET 480 SL can be applied at any growth stage of grain crops. The size of the weeds must correspond with the growth stages as listed in the "WEED CONTROL" table.

REGISTRATION DETAILS†
HORNET 480 SL
Active ingredient: bendioxide (thiadiazine) 480 g/ℓ
(Reg. No. L7708 Act 36 of 1947) (harmful)

AGRIZINE 500 SC
Active ingredient: atrazine 500g/ℓ
Reg. No. L5387 Act 36 of 1947 (harmful)

CANTRON 480 SC
Active ingredient: Mesotrione (callistemone) 480 g/ℓ
(Reg. No. L8365 Act 36 of 1947) (caution)

TERBUWEED 600 WDG
Active ingredient: Terbuthylazine 600 g/kg
(Reg. No. L8800 Act 36 of 1947) (caution)

TERBUSIEN SUPER 600 SC
Active ingredient: Atrazine (triazine) 291 g/ℓ & terbuthylazine (triazine) 291 g/ℓ & related active triazines 18 g/ℓ
(Reg. No. L5435 Act 36 of 1947)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Co. Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630
Tel: 011 396 2233

PACKAGING
5 ℓ

ALWAYS READ THE LABEL

LEAP 840 EC

HERBICIDE

Active ingredient: Acetochlor (chloroacetanilide) 840 g/ℓ
& benoxacor (safener) 49 g/ℓ
(Reg. No. 8064 Act 36 of 1947)

A pre-emergence emulsifiable concentrate herbicide with benoxacor for the control of most annual grasses and certain broad-leaved weeds in maize.




Photo 1. Goose grass (Eleusine indica)
Photo 2. Crabfinger grass (Digitaria sanguinalis)
Photo 3. Yellow nutgrass (Cyperus esculentus)
Photo 4. Common pigweed (Amaranthus hybridus)

Features

- LEAP 840 is an HRAC group K3 herbicide.
- Inhibits cell division, blocking protein synthesis.
- Pre-emergence, selective herbicide for grasses and certain broad-leaf weeds.
- Absorption mainly through hypocotyl of grasses and roots of broad-leaf weeds
- Compatible with several broad-leaf herbicides
- Good pre-emergence control of grasses.
- Formulated with herbicide safener benoxacor for pre-emergent application in maize.
- Suppression of *Cyperus spp.*
- Non- volatile.
- Generally provides 8-12 weeks of grass weed control. This may vary depending on soil characteristics and weather conditions.

ALWAYS READ THE LABEL

USE RATE†
- 0.75 ℓ – 2 ℓ/ha, depending on soil clay % and tank mixing partners.

Refer to label for specific recommendations for soil clay percentages and tank mix partners.

REGISTRATION DETAILS†
LEAP 840 EC
Active ingredient: acetochlor (chloroacetanilide) 840 g/ℓ & benoxacor (safener) 49 g/ ℓ
Reg. No. L 8064 Act 36 of 1947
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
10 ℓ

LEAP 840 EC

HERBICIDE

Active ingredient: Acetochlor (chloroacetanilide) 840 g/ℓ
& benoxacor (safener) 49 g/ℓ
(Reg. No. 8064 Act 36 of 1947)

A pre-emergence emulsifiable concentrate herbicide with benoxacor for the control of most annual grasses and certain broad-leaved weeds in maize.

Do's and don'ts

- Use low application rates of LEAP 840 EC on the sandy soils of the Northern and Western Free State and the North West Province.
- Use the lower dosage rate if a shorter period of residual control is desired.
- Apply the higher dosage rate in case of high grass pressure and or the suppression of yellow nutsedge.
- Do not apply LEAP 840 EC to poorly drained soils or soils with a compaction layer as the herbicides may cause crop injury in cases of waterlogging.
- Do not apply LEAP 840 EC to sandy soils susceptible to wind erosion.
- 10mm-20mm of rain or irrigation within 7-10 days after application is required for best results.
- Use in conjunction with a broad-leaf control herbicide.
- Does not control grasses post-emergence.

USE RATE†
- 0.75 ℓ – 2 ℓ/ha, depending on soil clay % and tank mixing partners.

Refer to label for specific recommendations for soil clay percentages and tank mix partners.

REGISTRATION DETAILS†
LEAP 840 EC
Active ingredient: acetochlor (chloroacetanilide) 840 g/ℓ & benoxacor (safener) 49 g/ ℓ
Reg. No. L 8064 Act 36 of 1947
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
10 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

LOTUS 480 SL

HERBICIDE

Active ingredient: dicamba (Benzoic compound) 480 g ae/ℓ
(Reg. No. L9599 Act 36 of 1947)

A water-soluble herbicide with selective hormone action for the control of broad-leaved weeds in maize.



Features

- LOTUS 480 SL is an HRAC group code O herbicide.
- LOTUS 480 SL is rapidly absorbed by plant leaves, stems, and roots and is translocated to the apical meristems (growth points).
- After absorption by the plant it causes rapid, abnormal, cell growth and the disruption of the normal auxin (hormonal) balance in the plant.
- LOTUS 480 SL controls a wide range of broad leaf weeds in maize.
- LOTUS 480 SL has no effect on grass weeds when applied post emergence.
- LOTUS 480 SL can be applied pre-plant in tank mixtures with GLYGRAN 710 SG for improved control of certain difficult to control broad-leaf weeds eg. *Conyza bonariensis*.

Do's and don'ts

- LOTUS 480 SL is not recommended for use on seed maize, sweetcorn or popcorn.
- Apply when weeds are in the 3 to 6 leaf stage.
- Apply from full emergence of the maize crop until a height of 30 cm has been reached.
- Stress conditions (drought, flooding) at time of application will result in poor weed control.
- Take care during application - LOTUS 480 SL is volatile and may lead to drift of the herbicide to non-target crops.
- Use drop arms for directional spraying when the maize crop exceeds 30 cm in height.
- Maize plants may become brittle and malformed after application, but this is normally of a temporary nature.

USE RATE†
- Pre-plant of Maize: LOTUS 480 SL 250mℓ to 320mℓ/ha in tank mixture with GLYGRAN 710 SG 1.0kg to 1.5kg/ha
- LOTUS 480 SL 85mℓ + 2,4 D AMINE 250mℓ/ha + TERBUSIEN SUPER 600 SC or TERBUCIDE 600 WDG 1.7 ℓ or kg/ha.

REGISTRATION DETAILS†
LOTUS 480 SL
Active ingredient: (dicamba (Benzoic compound) 480 g ae/ℓ
(Reg. No. L9599 Act 36 of 1947) (harmful)

GLYGRAN 710 SG
Active ingredient: glyphosate (glycine) 710 g ae/kg & glyphosate ammonium salt 780 g/kg
(Reg. No. L8449 Act 36 of 1947) (caution)

TERBUWEED 600 WDG
Active ingredient: Terbuthylazine 600 g/kg
(Reg. No. L8800 Act 36 of 1947)
(caution)

TERBUSIEN SUPER 600 SC
Active ingredient: Atrazine (triazine) 291 g/ℓ & terbuthylazine (triazine) 291 g/ℓ & related active triazines 18 g/ℓ
(Reg. No. L5435 Act 36 of 1947)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Co. Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630
Tel: 011 396 2233

2,4-D AMINE 480 SL
Active ingredient: (2,4-dichlorophenoxy) acetic acid 480 g/kg
Reg. No. L4505, Act 36 of 1947
(harmful)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

PACKAGING
5 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

MCPA 400 SL

HERBICIDE

Active ingredient: (4-chloro-2-methylphenoxy) acetic acid 400g/ℓ and potassium salt 470g/ℓ
(Reg. No. L5793 Act 36 of 1947)

A selective, soluble concentrate hormone type herbicide for the pre- and post-emergence control of annual broad-leaf weeds in maize.



Photo 1: Commelina benghalensis
Photo 2: Bidens pilosa
Photo 3: Galinsoga parviflora

Features

- MCPA 400 SL is an HRAC group code O herbicide.
- MCPA 400 SL is a selective, soluble concentrate hormone type herbicide for pre-emergence and post-emergence control of a broad spectrum of annual broad-leaf weeds in maize.
- MCPA 400 SL may be applied pre- or early post- emergent of broad-leaf weeds.
- Grass weeds already emerged at the time of application will not be controlled.
- MCPA 400 SL is a hormone type herbicide that interferes with the naturally occurring hormone auxin in the plant, resulting in abnormal growth and eventual death.
- Rain one day after application will not reduce the effectiveness of the herbicide.
- When applied pre-emergence also controls certain grass weeds including *Eleusine indica*.

Do's and don'ts

- Apply MCPA 400 SL post emergence, as an interrow directed spray.
- Weeds should only be sprayed in the young stages and when actively growing in moist soil.
- Avoid spray solution being deposited in the funnels of maize plants.
- Do not permit spray drift, or vapour to come into contact with susceptible crops, e.g. all broadleaf crops, fruit trees and ornamental plants as well as all grain varieties in a susceptible stage of growth.
- Use low-pressure flat fan nozzles of 80 degrees or equivalent anti-drift type and do not exceed a spray pressure of 200 kPa.
- Do not exceed a spray height of 50 cm above target and a ground speed of 10 km per hour.

USE RATE†
- Pre-emergence: Apply 3.25 to 6.5ℓ/ha depending on soil clay percentage (consult product label). Apply 5 to 6 days after planting when soil is sufficiently moist and in good tilth.
- Post emergence. Apply 2.5ℓ/ha in at least 150ℓ water per hectare (Ground Application). Apply only if the crop has reached a height of 45 cm.

REGISTRATION DETAILS†
MCPA 400 SL
Active ingredient: (4-chloro-2-methylphenoxy) acetic acid 400g/ℓ and potassium salt 470g/ℓ
(Reg. No. L5793 Act 36 of 1947)
(harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
5 ℓ

METOLACHLOR 915 EC

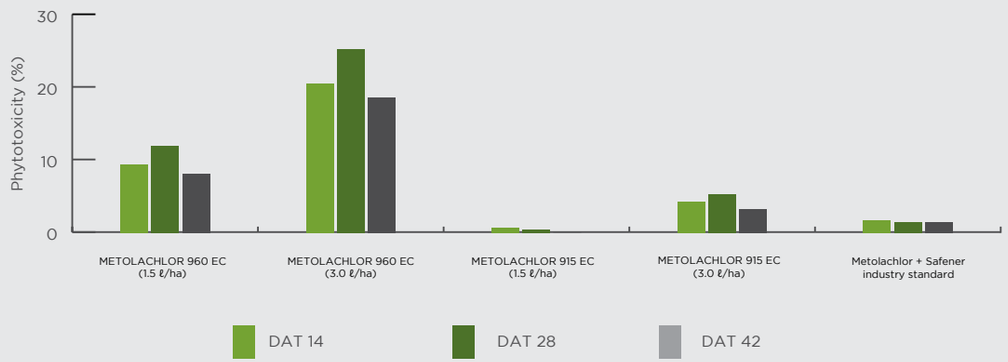
HERBICIDE

Active ingredient: Metolachlor (chloroacetanilide) 915 g/ℓ
& benoxacor (safener) 30.5 g/ℓ
(Reg. No. L7841 Act 36 of 1947)

A pre-emergence emulsifiable concentrate herbicide with benoxacor for the control of most annual grasses and certain broad-leaved weeds in maize.

Photo 1. Crab fingergrass (Digitaria sanguinalis)
Photo 2. Yellow nutsedge (Cyperus esculentus)
Photo 3. Goose grass (Eleusine indica)
Photo 4. Garden Urochloa (Urochloa panicoides)

Fig 1.1: Summary of 3 trials showing the selectivity of METOLACHLOR 915 EC (containing the benoxacor safener) when applied to maize on the drift sand soils of the North Western Free State. The graph shows the mean percentage visual phytotoxicity of 3 experiments, 14, 28 and 42 days after treatment (DAT) with METOLACHLOR 915 EC in maize.



USE RATE†
- Dosage rate: 0,8 ℓ– 2,1 ℓ depending on soil clay % and tank-mixing partners
- Refer to label for specific recommendations

REGISTRATION DETAILS†
METOLACHLOR 915 EC
Active ingredient: metolachlor (chloroacetanilide) 915 g/ℓ
& benoxacor (safener) 30.5 g/ℓ
Reg. No. L7841, Act 36 of 1947
(harmful)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

PACKAGING
10 ℓ

ALWAYS READ THE LABEL

METOLACHLOR 915 EC

HERBICIDE

Active ingredient: Metolachlor (chloroacetanilide) 915 g/ℓ
& benoxacor (safener) 30.5 g/ℓ
(Reg. No. L7841 Act 36 of 1947)

A pre-emergence emulsifiable concentrate herbicide with benoxacor for the control of most annual grasses and certain broad-leaved weeds in maize.

Features

- METOLACHLOR 915 EC is an HRAC Group K3 selective herbicide.
- Absorbed by the hypocotyls and shoots of germinating weeds.
- Pre-emergence control of annual grass weeds.
- Safe when applied on maize.
- Contains a safener (benoxacor).
- Compatible with numerous broad-leaf herbicides.
- Cell division inhibitor - ideal pre-emergence control of grasses and certain broadleaf weeds.
- Good suppression of yellow nutsedge *(Cyperus spp.)*.

Do's and don'ts

- Use in conjunction with a broad-leaf control herbicide.
- Does not control grasses post- emergence.
- Use pre-emergence of maize an weeds.
- Do not apply to inbred parent maize plants or experimental cultivars.
- Apply to a fine, even seedbed, free of clots, trash and weeds.
- 10-20mm rain within 7-10 days after application is necessary for good results.

USE RATE†
- Dosage rate: 0,8 ℓ– 2,1 ℓ depending on soil clay % and tank-mixing partners
- Refer to label for specific recommendations

REGISTRATION DETAILS†
METOLACHLOR 915 EC
Active ingredient: metolachlor (chloroacetanilide) 915 g/ℓ
& benoxacor (safener) 30.5 g/ℓ
Reg. No. L7841, Act 36 of 1947
(harmful)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

PACKAGING
10 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

METOLACHLOR 960 EC

HERBICIDE

Active ingredient: metolachlor (chloroacetanilide) 960 g/ℓ
(Reg. No. L7136, Act 36 of 1947)

A pre-emergence emulsifiable concentrate herbicide for the control of most annual grasses and certain broad-leaved weeds when applied as an as early post- emergence application in maize.




Photo 1. Crab fingergrass (Digitaria sanguinalis)
Photo 2. Yellow nutsedge (Cyperus esculentus)
Photo 3. Goose grass (Eleusine indica)
Photo 4. Garden Urochloa (Urochloa panicoides)

Features

- METOLACHLOR 960 EC is an HRAC group code K3 herbicide.
- METOLACHLOR 960 EC is used as a post emergent, follow up treatment, to a pre- emergent application of METOLACHLOR 800 EC at planting.
- METOLACHLOR 960 EC is a selective pre-emergent herbicide for the control mainly annual grasses and certain broad-leaf weeds.
- METOLACHLOR 960 EC is absorbed predominantly by the hypocotyl and shoots of germinating grass weeds.
- Under favourable soil conditions, METOLACHLOR 960 EC provides variable control of yellow nutgrass *(Cyperus esculentus)*.
- The application of METOLACHLOR 960 EC is intended to provide extended pre-emergent grass control in maize.

USE RATE†
- Apply METOLACHLOR 960 EC as a follow up application after a pre-emergent application of METOLACHLOR 800 EC:
- Apply the following rates depending on soil clay %:
- METOLACHLOR 960 EC 0.45 to 0.7 ℓ/ha + TERBUSIEN SUPER 600 SC 2.2 to 3.0 ℓ/ha.
- Consult the product label for detailed recommendation.

REGISTRATION DETAILS†
METOLACHLOR 960 EC
Active ingredient: Metolachlor (chloroacetanilide) 960 g/ ℓ
(Reg. No. L7136 Act 36 of 1947)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

TERBUSIEN SUPER 600 SC
Active ingredient: Atrazine (triazine) 291 g/ℓ & terbuthylazine (triazine) 291 g/ℓ & related active triazines 18 g/ℓ
(Reg. No. L5435 Act 36 of 1947)
(harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
10 ℓ

ALWAYS READ THE LABEL

METOLACHLOR 960 EC

HERBICIDE

Active ingredient: metolachlor (chloroacetanilide) 960 g/ℓ
(Reg. No. L7136, Act 36 of 1947)

A pre-emergence emulsifiable concentrate herbicide for the control of most annual grasses and certain broad-leaved weeds when applied as an as early post- emergence application in maize.

Do's and don'ts

- Do not apply METOLACHLOR 960 EC to poorly drained soils or soils with a compaction layer, as waterlogging and herbicide injury may occur.
- Heavy rain (25 mm per day or 50 mm over a 3- to 7-day period) on very sandy soils (< 15 % clay) low in organic matter (< 1 %), as well as flood irrigation can reduce weed control performance.
- Prepare a fine, even and firm seedbed free of weeds, trash and clods.
- Apply METOLACHLOR 960 EC or its tank mixtures as a post-emergent application to maize, after a pre-emergent herbicide used at planting.
- Use 200 litres spray mixture per hectare for overall ground application and 30 to 40 litres per hectare for aerial application.
- 10 to 20 mm rain within 7 to 10 days after application is necessary for good results.

USE RATE†
- Apply METOLACHLOR 960 EC as a follow up application after a pre-emergent application of METOLACHLOR 800 EC:
- Apply the following rates depending on soil clay %:
- METOLACHLOR 960 EC 0.45 to 0.7 ℓ/ha + TERBUSIEN SUPER 600 SC 2.2 to 3.0 ℓ/ha.
- Consult the product label for detailed recommendation.

REGISTRATION DETAILS†
METOLACHLOR 960 EC
Active ingredient: Metolachlor (chloroacetanilide) 960 g/ ℓ
(Reg. No. L7136 Act 36 of 1947)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

TERBUSIEN SUPER 600 SC
Active ingredient: Atrazine (triazine) 291 g/ℓ & terbuthylazine (triazine) 291 g/ℓ & related active triazines 18 g/ℓ
(Reg. No. L5435 Act 36 of 1947)
(harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
10 ℓ

ALWAYS READ THE LABEL

NICORON 750 WDG

HERBICIDE

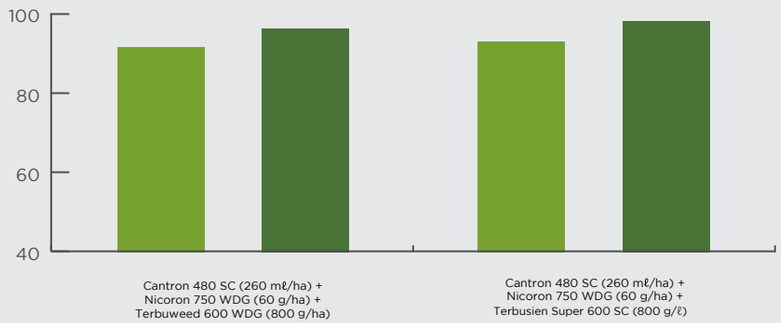
Active ingredient: Nicosulfuron (sulfonyl urea) 750 g/kg
(Reg. No. L8045, Act 36 of 1947)

A water dispersible granule, selective, systemic, post-emergence herbicide for the control of grasses, including *Sorghum halepense, Sorghum bicolor, Rottboellia cochinchinensis* and certain broad-leaf weeds in maize.




Photo 1. Wild grain sorghum (Sorghum bicolor)
Photo 2. Guinea fowl grass (Rottboellia cochinchinensis)
Photo 3. Johnson grass (Sorghum halepense)
Photo 4. Devil's thorn (Tribulus terrestris)

Summary of 2 trials showing the performance of NICORON 750 WDG when applied post-emergence, for the control of a number of weeds, when applied as various tank mixes. Graph shows the mean percentage overall weed control in the 2 trails at 21 and 42 days after treatment (DAT).



USE RATE†
- 60g/ha plus an adjuvant. Refer to label for dosage recommendations with tank mix partners

REGISTRATION DETAILS†
NICORON 750 WDG
Active ingredient: Nicosulfuron (sulfonyl urea) 750 g/kg
(Reg. No. L8045 Act 36 of 1947)
(caution)

CANTRON 480 SC
Active ingredient: Mesotrione (callistemone) 480 g/ℓ
(Reg. No. L8365 Act 36 of 1947)
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Co. Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630
Tel: 011 396 2233

PACKAGING
300 g

ALWAYS READ THE LABEL

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WINFIELD® UNITED

NICORON 750 WDG

HERBICIDE

Active ingredient: Nicosulfuron (sulfonyl urea) 750 g/kg
(Reg. No. L8045, Act 36 of 1947)

A water dispersible granule, selective, systemic, post-emergence herbicide for the control of grasses, including *Sorghum halepense, Sorghum bicolor, Rottboellia cochinchinensis* and certain broad-leaf weeds in maize.

Features

- NICORON 750 WDG is an HRAC group B *(sulfonylurea)* herbicide.
- Sulfonlyurea herbicides act by inhibiting acetolactate synthase, thereby blocking the biosynthesis of the branched-chain amino acids valine, leucine and isoleucine.
- NICORON 750 WDG applied post emergent, is effective against important problem grass weeds in maize as well as certain broad leaf weeds.
- NICORON 750 WDG is a selective, systemic, post-emergence, grass herbicide for weed control in maize.
- Compatible with most commonly used broadleaf herbicides.
- Stable, high load WDG formulation, with no formulation additives.
- NICORON 750 WDG controls the difficult grass weeds Johnson's grass *(Sorghum halepensis)*, wild grain sorghum *(Sorghum bicolor)* and guinea fowl grass *(Rottboellia cochinchinensis)*.
- NICORON 750 WDG also controls certain important broad leaf weeds eg. *Amaranthus thunbergii, Datura stramonium, Tagetes minuta,* and *Tribulus terrestris*.
- Can be tank mixed with CANTRON 480 SC.

Do's and don'ts

- A representative of the relevant seed company should be consulted before planting a field where NICORON 750 WDG is to be used.
- Do not apply this mixture by means of aerial application.
- Do not apply on sweetcorn, popcorn or seed maize.
- Do not apply NICORON 750 WDG in combination with an organophosphate insecticide, within 14 days of an organophosphate application or following in-furrow applications of organophosphate granular insecticides.

USE RATE†
- 60g/ha plus an adjuvant. Refer to label for dosage recommendations with tank mix partners

REGISTRATION DETAILS†
NICORON 750 WDG
Active ingredient: Nicosulfuron (sulfonyl urea) 750 g/kg
(Reg. No. L8045 Act 36 of 1947)
(caution)

CANTRON 480 SC
Active ingredient: Mesotrione (callistemone) 480 g/ℓ
(Reg. No. L8365 Act 36 of 1947)
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Co. Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630
Tel: 011 396 2233

PACKAGING
300 g

ALWAYS READ THE LABEL

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WINFIELD® UNITED

PALLADIUM PLUS 915 EC

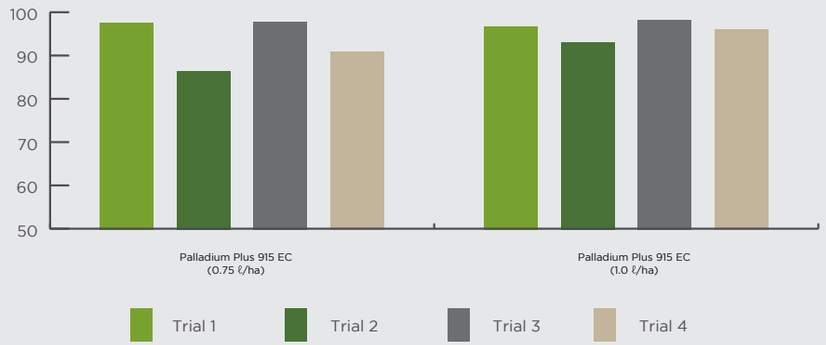
HERBICIDE

Active ingredient: S-metolachlor (chloroacetamide) 915 g/ℓ & benoxacor (safener) 30.5 g/ℓ
(Reg. No. L9359, Act 36 of 1947)

A pre-emergence emulsifiable concentrate herbicide with safener benoxacor for the control of most annual grasses and certain broad-leaf weeds in maize.




Summary of 4 trials in different regions on various soil types showing the perfomance of PALLADIUM PLUS 915 EC for the control of a number of weeds when applied pre-emergent. Graph shows the mean percentage overall weed control in each trial respectively.



USE RATE†
Dosage rates:
- 0.6 ℓ – 1.4 ℓ/ha
- Refer to label for specific dosage rates, mixture partners and weeds controlled.

REGISTRATION DETAILS†
PALLADIUM PLUS 915 EC
Active ingredient: S-metolachlor (chloroacetamide) 915 g/ℓ
& benoxacor (safener) 30.5 g/ℓ
(Reg. No. L9359 Act 36 of 1947)
(harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
7 ℓ, 10 ℓ, 20 ℓ

ALWAYS READ THE LABEL

villa | www.villacrop.co.za

WINFIELD® UNITED

PALLADIUM PLUS 915 EC

HERBICIDE

Active ingredient: S-metolachlor (chloroacetamide) 915 g/ℓ & benoxacor (safener) 30.5 g/ℓ
(Reg. No. L9359, Act 36 of 1947)

A pre-emergence emulsifiable concentrate herbicide with safener benoxacor for the control of most annual grasses and certain broad-leaf weeds in maize.

Features

- PALLADIUM PLUS 915 EC is an HRAC group K3 herbicide.
- PALLADIUM PLUS 915 EC contains s-metolachlor, a selective pre-emergence herbicide for weed control in maize.
- Controls mainly annual grasses with certain broad-leaf weeds.
- Absorbed by the hypocotyls and shoots.
- Contains an excellent, highly effective maize safener called benoxacor which protects the maize plant against damage under normal environmental conditions.
- Compatible with several other broad-leaf herbicides.

Do's and don'ts

- Use pre-emergence of the maize and weeds.
- Application should be performed at planting or not later than 3 days after planting.
- Use in combination with a registered broad-leaf herbicide for the control of a wider spectrum of weeds.
- Does not control grasses or broad-leaf weeds when already germinated.
- Performs best in a well prepared fine and even seedbed.
- Use the higher label rates for more consistent *Cyperus esculentes* (yellow nutsedge) control.
- 10-20mm of rain is required within 7-10 days of application to ensure good weed control.

USE RATE†
Dosage rates:
- 0.6 ℓ – 1.4 ℓ/ha
- Refer to label for specific dosage rates, mixture partners and weeds controlled.

REGISTRATION DETAILS†
PALLADIUM PLUS 915 EC
Active ingredient: S-metolachlor (chloroacetamide) 915 g/ℓ
& benoxacor (safener) 30.5 g/ℓ
(Reg. No. L9359 Act 36 of 1947)
(harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
7 ℓ, 10 ℓ, 20 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

PALLADIUM 960 EC

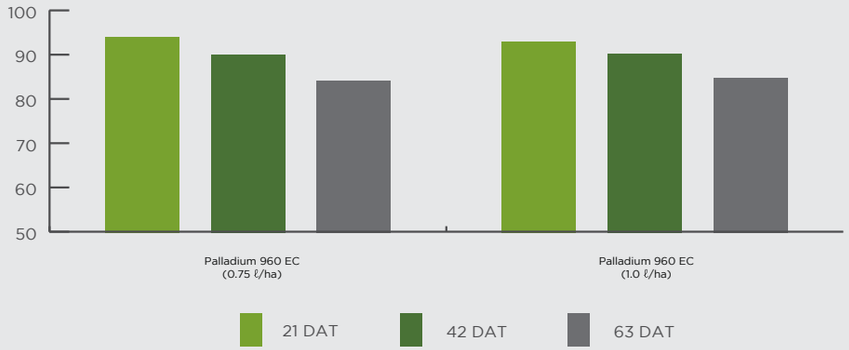
HERBICIDE

Active ingredient: S-metolachlor (chloroacetamide) 960 g/ℓ
(Reg. No. L9360, Act 36 of 1947)

A pre-emergent emulsifiable concentrate herbicide for the control of most annual grasses and certain broad-leaf weeds when applied early post-emergence in maize.




Summary of 3 trials in different regions and soil types showing the performance of PALLADIUM 960 EC, when applied post-emergence (maize crop) for the pre-emergent control of a number of different grass weeds. Graph shows the mean percentage overall weed control (5 different weeds) at 21, 42 and 63 days after treatment (DAT).



USE RATE†
Dosage rates:
- 0.6 – 0.9 ℓ/ha depending on soil clay % and tank mixing partners.
- Refer to label for specific dosage rates, mixture partners and weeds controlled.

REGISTRATION DETAILS†
PALLADIUM 960 EC
Active ingredient: S-metolachlor (chloroacetamide) 960 g/ℓ
(Reg. No. L9360 Act 36 of 1947)
(harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
7 ℓ, 8 ℓ, 10 ℓ, 20 ℓ

ALWAYS READ THE LABEL

villa | www.villacrop.co.za

WINFIELD® UNITED

PALLADIUM 960 EC

HERBICIDE

Active ingredient: S-metolachlor (chloroacetamide) 960 g/ℓ
(Reg. No. L9360, Act 36 of 1947)

A pre-emergent emulsifiable concentrate herbicide for the control of most annual grasses and certain broad-leaf weeds when applied early post-emergence in maize.

Features

- PALLADIUM 960 EC is an HRAC group K3 herbicide.
- Selective herbicide, absorbed predominantly by the hypocotyls and shoots of germinating grass weeds.
- Compatible with numerous broad-leaf herbicides.
- Contains only the active s-isomer of metolachlor, a selective pre-emergence herbicide for weed control in maize.
- Controls mainly annual grasses with certain broad-leaf weeds.
- PALLADIUM 960 EC has an aerial application registration.

Do's and don'ts

- Use in combination with a registered broad-leaf herbicide for the control of a wider spectrum of weeds.
- Does not control grasses or broad-leaf weeds when already germinated.
- Do not use pre-emergence of maize as it does not contain a safener.

USE RATE†
Dosage rates:
- 0.6 – 0.9 ℓ/ha depending on soil clay % and tank mixing partners.
- Refer to label for specific dosage rates, mixture partners and weeds controlled.

REGISTRATION DETAILS†
PALLADIUM 960 EC
Active ingredient: S-metolachlor (chloroacetamide) 960 g/ℓ
(Reg. No. L9360 Act 36 of 1947)
(harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
7 ℓ, 8 ℓ, 10 ℓ, 20 ℓ

ALWAYS READ THE LABEL

villa | www.villacrop.co.za

WINFIELD® UNITED

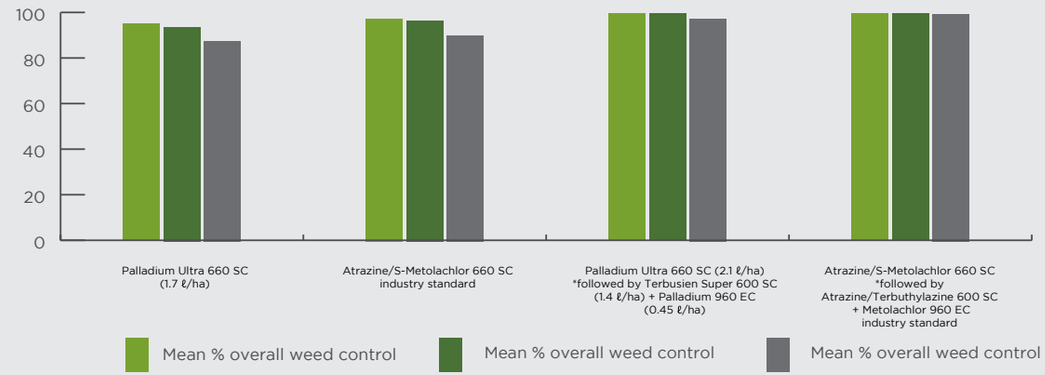
PALLADIUM ULTRA 660 SC

HERBICIDE

Active ingredient: Atrazine (triazine) 370 g/ℓ + s-metolachlor (chloroacetanilide) 290 g/ℓ + benoxacor (safener) 10.2 g/ℓ (Reg. No. L9922, Act 36 of 1947)

A suspension concentrate herbicide with benoxacor for selective control of most annual broad-leaf weeds as well as grasses in maize.



Summary of 3 trials showing the performance of PALLADIUM ULTRA 660 SC in controlling numerous weeds when applied pre-emergence in maize fields. The graphs shows the mean percentage overall weed control (6 different weed species) at 21, 42 and 64 days after treatment (DAT) respectively.

USE RATE†
Dosage rate:
- 1.25 - 2.5 ℓ/ha
- Refer to label for dosage recommendations for soil clay percentages and tank-mix partners

REGISTRATION DETAILS†
PALLADIUM ULTRA 660 SC
Active ingredient: Atrazine (triazine) 370 g/ℓ + s-metolachlor (chloroacetanilide) 290 g/ℓ + benoxacor (safener) 10.2 g/ℓ (Reg. No. L9922 Act 36 of 1947) (harmful)

VILLA 51
Active ingredient: Isotridecanol (alkylpolyethylene glycol ether) 918 g/ℓ (Reg. No. L8050 Act 36 of 1947) (harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
20 ℓ

ALWAYS READ THE LABEL

villa | www.villacrop.co.za

WINFIELD® UNITED

PALLADIUM ULTRA 660 SC

HERBICIDE

Active ingredient: Atrazine (triazine) 370 g/ℓ + s-metolachlor (chloroacetanilide) 290 g/ℓ + benoxacor (safener) 10.2 g/ℓ
(Reg. No. L9922, Act 36 of 1947)

A suspension concentrate herbicide with benoxacor for selective control of most annual broad-leaf weeds as well as grasses in maize.

Features

- PALLADIUM ULTRA 660 SC is a HRAC group C1+K3 herbicide.
- Contains two active ingredients with two modes of action.
- Selective systemic herbicide.
- Absorbed through the roots and the leaves.
- Contains a safener (benoxacor).
- Inhibits photosynthesis.
- Ideal for resistance management strategy.
- Safe to be used in maize pre-emergence.

Do's and don'ts

* PALLADIUM ULTRA 660 SC must be applied pre-emergence within 3 days of planting.
* The soil must have a fine, smooth surface, free of clots and trash.
- Apply PALLADIUM ULTRA 660 SC post-emergence, before broad-leaved weeds have developed beyond the 4-leaf stage and grasses have not yet emerged.
- When applied post emergence, add a suitable surfactant, e.g. VILLA 51, to the spray mixture.
- Take note of carry-over risk when rotating with crops sensitive to triazine herbicides, especially on sandy soils.
- Do not plant triazine sensitive crops in the season directly after soil pH adjustment with lime.
- Plant only maize after soil pH adjustment with lime.

USE RATE†
Dosage rate:
- 1.25 - 2.5 ℓ/ha
- Refer to label for dosage recommendations for soil clay percentages and tank-mix partners

REGISTRATION DETAILS†
PALLADIUM ULTRA 660 SC
Active ingredient: Atrazine (triazine) 370 g/ℓ + s-metolachlor (chloroacetanilide) 290 g/ℓ + benoxacor (safener) 10.2 g/ℓ
(Reg. No. L9922 Act 36 of 1947)
(harmful)

VILLA 51
Active ingredient: Isotridecanol (alkylpolyethylene glycol ether) 918 g/ℓ
(Reg. No. L8050 Act 36 of 1947)
(harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
20 ℓ

ALWAYS READ THE LABEL

villa | www.villacrop.co.za

WINFIELD® UNITED

SERIES 240 EC

HERBICIDE

Active ingredient: Clethodim (cyclohexanedione) 240 g/ℓ
(Reg. No. L8913, Act 36 of 1947)

A selective systemic herbicide for post-emergence control of grass weeds and volunteer maize (including glyphosate tolerant maize) in crops as indicated.




Photo 1. Control of glyphosate tolerant maize in soybean field with SERIES 240 EC
Photo 2. Effect of SERIES 240 EC on growth point of glyphosate tolerant maize 5 DAT
Photo 3. Typical purple symptoms of SERIES 240 EC on maize.
Photo 4. Early symptoms of SERIES 240 EC on Eleusine indica (Goosegrass)

Features

- SERIES 240 EC is an HRAC group A herbicide.
- A selective post-emergent grass herbicide for the control of glyphosate tolerant maize and other grass weeds.
- Rapidly absorbed by the leaves.
- Quick translocation to the root system and growing parts of the plant.
- Growth ceases soon after application with young, actively growing weeds affected first.
- No soil residual action on weeds.
- Glyphosate compatible.

Do's and don'ts

- Do not plant maize within 7 days after application for dosage rates up to 0.5 ℓ/ha (higher rates are not recommended when maize is to be planted as a follow up crop).
- Allow at least 4 days after the SERIES 240 EC application before applying any other agrochemical treatment.
- Rain or irrigation within 1 hour after application may require a follow-up application.
- Consult a seed representative if newly released cultivars are to be planted.
- Always use the recommended adjuvants.
- Weeds that have not emerged at the time of application will not be controlled.

USE RATE†
- 0.5-1.0 ℓ SERIES 240 EC
  Refer to label for recommended dosage rates with tank-mix partners.

REGISTRATION DETAILS†
- SERIES 240 EC
  Active ingredient: Clethodim (cyclohexanedione) 240 g/ℓ
  (Reg. No. L8913 Act 36 of 1947)
  (caution)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

PACKAGING
5 ℓ

ALWAYS READ THE LABEL

villa | www.villacrop.co.za

WINFIELD® UNITED

SLASH PLUS 540 SL/PANGA PLUS 540 SL

Active ingredient: Glyphosate (glycine) 540 g ae/ℓ
(glyphosate potassium salt 665 g/ℓ)
(Reg. No. L8819, Act 36 of 1947)

A soluble concentrate, non-selective, systemic post-emergence herbicide with slight or no soil activity for the control of weeds in maize.




Photo 1. Control of Cyperus esculentus with SLASH PLUS 540 SL
Photo 2. Crab fingergrass (Digitaria sanguinalis)
Photo 3. Flax-leaf fleabane (Conyza bonariensis)
Photo 4. Winter infestation of Senecio consanguineus on no-till field

Features

- SLASH PLUS 540 SL /PANGA PLUS 540 SL is an HRAC group code G9 herbicide.
- Provides control of both annual and perennial grass and broad-leaf weeds.
- Uptake (absorption) is fast and cultivation, planting or other soil preparation practices can take place the day after application.
- On contact with the soil, glyphosate binds to the clay particles and is decomposed over time by the soil microbes.
- The product has no soil residual effect, therefore has no root uptake and is safe to follow-up crops after application.
- Wilting of weeds will be visible within the first week after application of annual weeds and total death occurs 14-21 days after application.
- It is rain fast an hour after application on small actively growing annual weeds.
- Registered for use on glyphosate tolerant crops.

ALWAYS READ THE LABEL

USE RATE†
Glyphosate tolerant maize:
- General post-emergence weed control

Annual grasses and broad leaf weeds:
- 1.3 ℓ/ha SLASH PLUS 540 SL
  (apply before 100 mm height or 8-leaf stage of weeds)

Annual grasses and broadleaf weeds:
- 1.7 ℓ/ha SLASH PLUS 540 SL
  (apply between 100 and 200 mm or up to 12-leaf stage)

Difficult to control species requiring a follow-up spray:
- Wandering Jew *(Commelina benghalensis)*,
- Morning glory *(Ipomoea purpurea)*,
- Common purslane *(Portulaca oleracea)*,
- Devil's thorn *(Tribulus terrestris)*
- 2.0 ℓ/ha SLASH PLUS 540 SL

Difficult to control biennial and perennial weed species:
- Yellow nutsedge *(Cyperus esculentus)*,
- Conyza spp.
- 2.0 ℓ /ha SLASH PLUS 540 SL

REGISTRATION DETAILS†
SLASH PLUS 540 SL
Active ingredient: Glyphosate (glycine) 540 g ae/ℓ
(glyphosate potassium salt 665 g/ℓ)
(Reg. No. L8819 Act 36 of 1947)
(caution)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

VELOCITY-DRYMAX
Active ingredient: Ammonium sulphate 1000 g/kg
(Reg. No. L9454 Act 36 of 1947)
(caution)

PACKAGING
20 ℓ

villa | www.villacrop.co.za

WINFIELD® UNITED

SLASH PLUS 540 SL/PANGA PLUS 540 SL

HERBICIDE

Active ingredient: Glyphosate (glycine) 540 g ae/ℓ
(glyphosate potassium salt 665 g/ℓ)
(Reg. No. L8819, Act 36 of 1947)

A soluble concentrate, non-selective, systemic post-emergence herbicide with slight or no soil activity for the control of weeds in maize.

Do's and don'ts

- Always use clean water, free of mud or organic material.
- For optimum results, always apply product on actively growing, stress free weeds.
- Avoid applications during high temperatures and when humidity is low.
- Do not spray weeds covered with dust.
- Apply the product at a minimum volume rate of 125 liters spray mixture per hectare.
- The addition of ammonium sulphate (VELOCITY DRY-MAX) to spray mixture is recommended for effective weed control.
- For optimum and consistent results, it's recommended to add a non-ionic surfactant at 0.5% solution to the spray volume.

USE RATE†

Glyphosate tolerant maize:
- General post-emergence weed control

Annual grasses and broad leaf weeds:
- 1.3 ℓ/ha SLASH PLUS 540 SL
  (apply before 100 mm height or 8-leaf stage of weeds)

Annual grasses and broadleaf weeds:
- 1.7 ℓ/ha SLASH PLUS 540 SL
  (apply between 100 and 200 mm or up to 12-leaf stage)

Difficult to control species requiring a follow-up spray:
- Wandering Jew *(Commelina benghalensis)*,
- Morning glory *(Ipomoea purpurea)*,
- Common purslane *(Portulaca oleracea)*,
- Devil's thorn *(Tribulus terrestris)*
- 2.0 ℓ/ha SLASH PLUS 540 SL

Difficult to control biennial and perennial weed species:
- Yellow nutsedge *(Cyperus esculentus)*,
- Conyza spp.
- 2.0 ℓ /ha SLASH PLUS 540 SL

REGISTRATION DETAILS†

SLASH PLUS 540 SL
Active ingredient: Glyphosate (glycine) 540 g ae/ℓ
(glyphosate potassium salt 665 g/ℓ)
(Reg. No. L8819 Act 36 of 1947)
(caution)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

VELOCITY-DRYMAX
Active ingredient: Ammonium sulphate 1000 g/kg
(Reg. No. L9454 Act 36 of 1947)
(caution)

PACKAGING
20 ℓ

ALWAYS READ THE LABEL

villa | www.villacrop.co.za

WINFIELD® UNITED

TERBUCIDE PLUS 900 WDG

HERBICIDE

Active ingredient: Atrazine (triazine) 450 g/kg &
terbuthylazine (triazine) 450 g/kg
(Reg. No. L9888 Act 36 of 1947)

A dispersible granule herbicide for selective control of most annual broad-leaf weeds as well as goose grass in maize.

Features

- Convenient, high load, easily dispersible dry granule formulation.
- TERBUCIDE PLUS 900 WDG is a combination of two triazine herbicides, terbythylazine and atrazine. Triazine is an HRAC group code C1 herbicide.
- Systemic herbicide absorbed through the roots and leaves, with translocation in the xylem and accumulation in the apical meristems and leaves.
- Atrazine and terbuthylazine have different leaching profiles in the soil, enabling control of shallow and deep germinating broad-leaf weeds.
- Compatibility with various other grass and broad-leaf herbicides.
- Can be applied during pre- or post-emergence weed control in maize.

Do's and don'ts

- Do not apply post-emergence after the 4-leaf stage of broad-leaf weeds and after emergence of grasses.
- Add a suitable surfactant such as VILLA 51 to the spray mixture, when applied post-emergence.
- TERBUCIDE PLUS 900 WDG may remain active for longer than waiting periods indicate when applied to turf soils that expand and crack on wetting.
- Do not apply TERBUCIDE PLUS 900 WDG to inbred parent plants of maize or newly released cultivars.

USE RATE†
- Light sand/sand (clay 0 - 10 %) 1.3 kg/ha
- Loamy sand/sandy loam (11- 20 %) 1.8 kg/ha
- Sandy clay loam (clay 21- 30 %) |2.2 kg/ha
- Sandy clay loam/sandy clay (clay 31- 40 %) 2.7 kg/ha
- Sandy clay and soils high in organic matter (clay 41- 50 %) 2.7 kg/ha

- *NB: On soils with 11- 20 % clay where the carry-over effect of triazines to groundnuts or other sensitive crops needs to be avoided, a tank mixture of 1.1 kg/ha TERBUCIDE PLUS 900 WDG + 0.7 ℓ/ha METOLACHLOR 915 EC / PLATINUM PLUS 915 EC is recommended.*

REGISTRATION DETAILS†
TERBUCIDE PLUS 900 WDG
Active ingredient: Atrazine (triazine) 450 g/kg & terbuthylazine (triazine) 450 g/kg,
Reg. No. L9888, Act 36 of 1947
(harmful)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

VILLA 51
Active ingredient: Isotridecanol (alkylpolyethylene glycol ether) 918 g/
Reg. No. L8050, Act 36 of 1947
(harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
10 kg

ALWAYS READ THE LABEL

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WINFIELD® UNITED

TERBUSIEN SUPER 600 SC

HERBICIDE

Active ingredient: Atrazine (triazine) 291 g/ℓ & terbuthylazine (triazine) 291 g/ℓ & related active triazines 18 g/ℓ
(Reg. No. L5435 Act 36 of 1947)

A suspension concentrate herbicide for selective control of most annual broad-leaf weeds as well as goose grass *(Eleusine indica)* in maize.




Features

- TERBUSIEN SUPER 600 SC is an HRAC group C1 herbicide.
- Can be applied either pre- or post-emergence to maize and is effective against most broad-leaved weeds.
- Contains two triazines with different leaching indexes that provide longer residual soil activity, enabling control of shallow and deep germinating broad-leaf weeds.
- Compatible with several grass and broad-leaf weed herbicides for wider spectrum of weed control.

Do's and don'ts

- Take note of carry-over risk in crop rotation systems on sandy soils.
- Do not tank-mix with glyphosate as atrlzine is incompatible with glyphosate.
- High pH soil or soil that has been limed will increase the risk of carry-over to sensitive crops.
- For optimum control, broad-leaf weeds should not be beyond the 4-leaf stage or higher than 10 cm at the time of application.

USE RATE†
- TERBUSIEN SUPER 600 SC can only be applied post-emergence if broad-leaf weeds have not developed beyond the 4-leaf stage.

Dosage rates:
- 2 ℓ - 4 ℓ/ha depending on soil clay %
- Refer to label for for specific dosage rates, mixture partners and weeds controlled.

REGISTRATION DETAILS†
TERBUSIEN SUPER 600 SC
Active ingredient: Atrazine (triazine) 291 g/ℓ & terbuthylazine (triazine) 291 g/ℓ & related active triazines 18 g/ℓ (Reg. No. L5435 Act 36 of 1947) (harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
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PACKAGING
20 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

TERBUWEED 600 WDG

Active ingredient: Terbuthylazine 600 g/kg
(Reg. No. L8800 Act 36 of 1947)

A water dispersible granule herbicide used for selective control of most annual broad-leaf weeds, as well as goose grass *(Eleusine indica)* in maize.




Photo 1: Amaranthus hybridus
Photo 2: Datura stramonium
Photo 3: Bidens pilosa
Photo 4: Portulaca oleracea

Features

- TERBUWEED 600 WDG is an HRAC group code C1 (triazine) herbicide.
- Triazine herbicides act by inhibiting photosynthesis,
- TERBUWEED 600 WDG is applied pre- or early post-emergence of weeds.
- TERBUWEED 600 WDG is effective against a wide range of important broad-leaf weeds in maize as well as *Eleusine indica* (Goose grass).
- Compatible with most commonly used pre-emergent grass herbicides eg. s-metolachlor.
- Compatible with GLYGRAN 710 SG and SLASH PLUS 540 SL for application in glyphosate tolerant maize cultivars.

Do's and don'ts

- For optimum control, broad-leaf weeds should not be beyond the 4-leaf stage or higher than 10 cm at the time of application.
- Do not exceed a total of 1.5 kg per hectare (1.0 kg active ingredient) if follow-up crops, sensitive to Triazines, such as winter cereals, legumes, vegetables, etc, are to be planted the next season.
- Do not apply TERBUWEED 600 WDG to alkaline soils and/or shallow soils that are subject to waterlogging.
- TERBUWEED 600 WDG does not control established weeds or weeds that develop from underground vegetative material, e.g. rootstocks.

ALWAYS READ THE LABEL

HERBICIDE

USE RATE†
- 800 g/ha. Refer to label for dosage recommendations with tank mix partners

REGISTRATION DETAILS†
TERBUWEED 600 WDG
Active ingredient: Terbuthylazine 600 g/kg
(Reg. No. L8800 Act 36 of 1947)
(caution)

GLYGRAN 710 SG
Active ingredient: glyphosate (glycine) 710 g ae/kg & glyphosate ammonium salt 780 g/kg
(Reg. No. L8449 Act 36 of 1947)
(caution)

Registration holder:
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SLASH PLUS 540 SL
Active ingredient: Glyphosate (glycine) 540 g ae/ℓ
(glyphosate potassium salt 665 g/ℓ)
(Reg. No. L8819 Act 36 of 1947)
(caution)

Registration holder:
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PACKAGING
10 kg

TETRAMET SC

HERBICIDE

Active ingredient: metolachlor (chloroacetanilide) 252 g/ℓ, atrazine (triazine) 174 g/ℓ, terbuthylazine (triazine) 174 g/ℓ, benoxacor 8g/ℓ (Reg. No. L8158 Act 36 of 1947)

A suspension concentrate herbicide with benoxacor as safener for the control of most annual grasses and certain broad-leaf weeds in maize.




Photo 1: Amaranthus hybridus
Photo 2: Chloris virgata
Photo 3: Datura stramonium
Photo 4: Digitaria sanguinalis

Features

- TETRAMET SC is an HRAC group code C1 (triazine) and K3 (chloroacetanilide) herbicide.
- TETRAMET SC is applied pre- or early post- emergence of weeds.
- TETRAMET SC is effective against a wide range of important broad-leaf weeds and grasses in maize.
- TETRAMET SC is used pre-emergence for selective control of certain annual grasses and broad-leaf weeds in maize.

Do's and don'ts

- TETRAMET SC can only be applied post-emergence if broad-leaved weeds have not developed beyond the 4-leaf stage and grasses have not yet emerged.
- When TETRAMET SC is applied post-emergence to the weeds, a suitable Villa surfactant should be added to the spray mixture.
- Do not apply TETRAMET SC to inbred parent plants of maize hybrids nor onto experimental or newly released cultivars.
- TETRAMET SC should not be used on turf soils if triazine sensitive crops might be planted in the foreseeable future.
- On soils with 11 to 20 % clay, where the carry-over effect of triazines to groundnuts or other sensitive crops needs to be avoided, an application rate of 3.0lt/ha is recommended.
- If dry conditions prevail for a period of 7 to 14 days after pre-emergence application certain weed species may not be adequately controlled (see product label for details).

USE RATE†
- 3.0 to 4.2 ℓ/ha depending on soil clay %.

REGISTRATION DETAILS†
TETRAMET SC
Active ingredient: Tetramet SC metolachlor 252 g/ℓ , atrazine 174 g/ℓ, terbuthylazine 174 g/ℓ, benoxacor 8g/ℓ (Reg. No. L8158 Act 36 of 1947) (harmful)

Registration holder:
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PACKAGING
20 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

FUNGICIDE

Trade name	Active Ingriedient	Target Species
ACADEMY 250 SC	picoxystrobin	Grey leaf spot, Northern leaf blight, rust
ARIA 188 SC	carbendazim + difenoconazole	Grey leaf spot, Northern leaf blight, rust
D-ZOLE 250EC	difenoconazole	Grey leaf spot, Northern leaf blight, rust
FACULTY TOP	picoxystrobin + prothioconazole	Grey leaf spot, Northern leaf blight, rust
INDICATE 250 SC	azoxystrobin + epoxiconazole	Grey leaf spot, Northern leaf blight, rust
MYCOBLOCK 250 SC	azoxystrobin	Grey leaf spot, Northern leaf blight, rust
SANTANA 480 SC	prothioconazole	Grey leaf spot, Northern leaf blight, rust
SPARTA 375 SC	flusilazole + carbendazim	Grey leaf spot, Northern leaf blight, rust

↑ **Click on product links above to get to more information on this product.**

ACADEMY 250 SC

FUNGICIDE

Active ingredient: Picoxystrobin (strobilurin) 250 g/ℓ
(Reg. No. L10034, Act 36 of 1947)

A suspension concentrate, systemic fungicide with contact and translaminar action for the preventative control of rust, grey leaf spot and Northern leaf blight in maize.

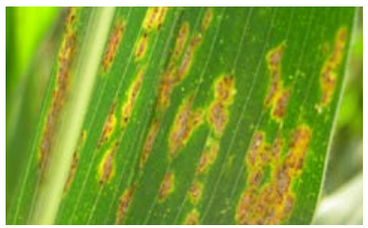

Photo 1: Leaf rust on maize.
Photo 2 Grey leaf spot on maize.
Photo 3: Northern leaf blight on maize.

Features

- ACADEMY 250 SC is a FRAC group code 11 fungicide.
- Inhibits mitochondrial respiration of fungi.
- ACADEMY 250 SC controls grey leaf spot and Northern leaf blight in maize.
- Unique redistribution properties showing locally systemic activity at the leaf base as well as acropetal movement to the leaf tips.
- ACADEMY 250 SC is a preferred product for use in combination with other products in a programme, hence forming a vital part in an anti-resistance strategy.
- Research has shown that strobilurins can increase physiological effects, which are beneficial to the crop.

Do's and don'ts

- DO NOT apply more than 2 (two) sprays per season.
- Apply the first application of the ACADEMY 250 SC tank-mix at the 5 to 6 leaf stage before any disease symptoms are noticed.
- A second application of the ACADEMY 250 SC tank-mix is recommended 3 to 4 weeks later.
- Alternate ACADEMY 250 SC with registered fungicides from different group codes.

USE RATE†

- **Grey leaf spot *(Cercospora zeae-maydis)*, Northern leaf blight *(Exserohilum turcicum)*, Rust *(Puccinia sorghi)***
- ACADEMY 250 SC 400 mℓ/ha + SANTANA 480 SC 140 mℓ/ha +DIRECT
- Ground application: Apply in 300 to 500 ℓ water per hectare.
- Aerial application: Apply in 30 to 40 ℓ water per hectare.

REGISTRATION DETAILS†

ACADEMY 250 SC
Active Ingredient: Picoxystrobin (Strobilurin) 250 g/ℓ
Reg. No. L10034, Act 36 Of 1947
(Harmful)

DIRECT
Active ingredient: Polyetherpolymethylsiloxanecopolymer 300 g/ℓ and vegetable oil 650 g/ℓ
Reg. No. L8680, Act 36 of 1947
(caution)

SANTANA 480 SC
Active ingredient: Prothioconazole (triazole) 480 g/ℓ
Reg. No. L10049, Act 36 of 1947
(harmful)

Registration holder:
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PACKAGING
5 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

ARIA 188 SC

FUNGICIDE

Active ingredient: Difenoconazole 62.5 + carbendazim 125 g/ℓ
(Reg. No. L7943, Act 36 of 1947)

A suspension concentrate systemic fungicide for the preventative control of Northern leaf blight and grey leaf spot in maize and sweetcorn.

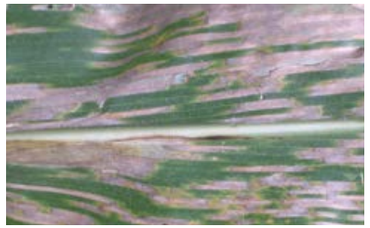

Photo 1. Northern leaf blight.
Photo 2. Grey leaf spot.

Features

- ARIA 188 SC is a FRAC group code 1 and 3 fungicide mixture.
- ARIA 188 SC is a systemic fungicide containing two active ingredients with different modes of action.
- The two fungicide components of ARIA 188 SC are: Difenoconazole, a DMI fungicide with strong translaminar and limited acropetal movement, and Carbendazim, an MBC fungicide with acropetal movement.
- ARIA 188 SC is compatible with the surfactant VILLA 51.

Do's and don'ts

- Apply ARIA 188 SC as part of an integrated disease management programme in conjunction with MYCOBLOCK 250 SC.
- Apply as a full cover spray in 300 to 400 litres water per hectare.
- Commence the programme with the first application of MYCOBLOCK 250 SC at the 5 to 6 leaf stage, before any disease symptoms are noticed.
- Apply ARIA 188 SC 3 weeks later.
- Under continued high disease pressure, a second application of ARIA 188 SC is recommended, 3 to 4 weeks later.
- The uptake and activity of ARIA 188 SC may be reduced when crops are under severe water stress.

USE RATE†
- **Grey leaf spot**
  (Cercospora zeae-maydis)
  1.0 – 1.2 ℓ/ha + VILLA 51

- **Northern leaf blight**
  (Exserohilum turcicum)
  to 1.2 ℓ/ha + VILLA 51

REGISTRATION DETAILS†
ARIA 188 SC
Active ingredient: Difenoconazole 62.5 + carbendazim 125 g/per ℓ
Reg. No. L 7943 Act 36 of 1947
(caution)

VILLA 51
Active ingredient: Isotridecanol (alkylpolyethylene glycol ether) 918 g/ℓ
Reg. No. L8050, Act 36 of 1947
(harmful)

Registration holder:
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Tel. (011) 396-2233

MYCOBLOCK 250 SC
Active ingredient: Azoxystrobin (strobilurin) 250 g/ℓ
Reg. No. L8591, Act 36 of 1947
(caution)

Registration holder:
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Reg. No. 1983/008184/07
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PACKAGING
5 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

D-ZOLE 250 EC

FUNGICIDE

Active ingredient: Difenoconazole (triazole) 250 g/ℓ
(Reg. No. L7923, Act 36 of 1947)

An emulsifiable concentrate, systemic action fungicide for the preventative control of grey leaf spot and Northern leaf blight in maize.



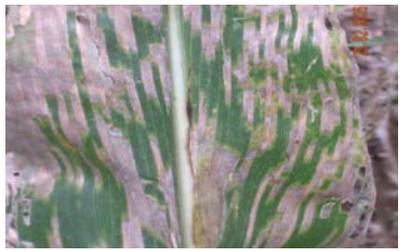

Photo 1: Northern leaf blight on maize
Photo 2: Grey leaf spot on maize
Photo 3: Grey leaf spot on maize

Features

- D-ZOLE 250 EC is a FRAC group code 3 fungicide.
- D-ZOLE 250 EC controls grey leaf spot and Northern leaf blight in maize.
- Ideal mixing partner for azoxystobin (MYCOBLOCK 250 SC).
- Low application rate results in less product required for similar efficacy versus other triazoles.

Do's and don'ts

- Apply D-ZOLE 250 EC as part of a spray programme with MYCOBLOCK 250 SC.
  - Northern leaf blight - apply the first application during the 8- to 10-leaf stage (maize growth stage 35).
  - Grey leaf spot - commence application before 3 % of the total leaf surface area exhibit disease symptoms, or if symptoms are observed on the bottom 3 to 5 leaves.
  - A third application may be required in cases where the first application was made early.
- The uptake and activity of D-Zole may be adversely affected under water related stress conditions.
- Ensure thorough coverage of the whole plant.
- DO NOT apply D-ZOLE 250 EC (or related fungicides) exclusively for prolonged periods throughout the season, to limit the development of resistance.

USE RATE†
- 300 mℓ/ha plus a suitable Villa adjuvant; Apply in 300-500 ℓ water per hectare (Ground application)

REGISTRATION DETAILS†
D-ZOLE 250 EC
Active ingredient: Difenoconazole (triazole) 250 g/ℓ
Reg. No. L7923, Act 36 of 1947
(caution)

MYCOBLOCK 250 SC
Active ingredient: Azoxystrobin (strobilurin) 250 g/ℓ
Reg. No. L8591, Act 36 of 1947
(caution)

Registration holder:
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Reg. No. 1983/008184/07
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PACKAGING
1 ℓ

ALWAYS READ THE LABEL

FACULTY TOP 250 SC

FUNGICIDE

Active ingredient: Picoxystrobin 150g + prothioconazole 100g per ℓ
(Reg. No. L10213, Act 36 of 1947)

A suspension concentrate, systemic action fungicide for the preventative control of diseases in maize.

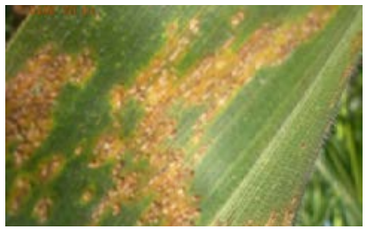

Figure 1. Grey leaf spot
Figure 2. Northern leaf blight
Figure 3. Rust

Features

- FACULTY TOP 350 EC is a FRAC group code 11 and 3 fungicide.
- Two active ingredients with different modes of action.
- FACULTY TOP 250 SC provides protective and curative protection to treated plants.
- FACULTY TOP 350 SC is a suspension concentrate, systemic action fungicide for the preventative control of grey leaf spot *(Cercospora zeae-maydis)*, northern leaf blight *(Exserohilum turcicum / Setosphearia turcica)* and rust *(Puccinia sorghi)* in maize.
- Prothioconazole is a sterol demethylation inhibitor that affects ergosterol biosynthesis in fungi.
- It moves systemically in treated plants.
- Picoxystrobin is a strobilurin fungicide which functions by inhibiting mitochondrial respiration.
- Picoxystrobin has translaminar, acropetal movement in treated plants.

Do's and don'ts

- FACULTY TOP 250 SC is recommended in an integrated disease management programme.
- Apply the first application of FACULTY TOP 250 SC preventively, at the 4 to 6 leaf stage before any disease symptoms are noticed.
- A second application is recommended 3-weeks later.
- A minimum of 250 ℓ of spray mixture must be applied per hectare (ground application).
- Do not mix with seaweed extracts.
- Add a Villa approved surfactant when using FACULTY TOP 250 SC.

USE RATE†
- Ground application:
  700 mℓ /ha + DIRECT 50 mℓ /100 ℓ water.
  Apply as a full cover spray in 250 to 500 ℓ /ha.
- Aerial application:
  700 mℓ /ha + DIRECT 100 mℓ /100 ℓ water. Apply in 30 to 40 ℓ water/ha.

REGISTRATION DETAILS†
FACULTY TOP 250 SC
Active ingredient: Picoxystrobin 150 g + prothioconazole 100 g per ℓ
Reg. No. L 10213 Act 36 of 1947
(caution)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
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DIRECT
Active ingredient:
Polyetherpolymethylsiloxanecopolymer 300 g/ℓ and vegetable oil 650 g/ℓ
Reg. No. L8680, Act 36 of 1947
(caution)

Registration holder:
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Tel: 011 396 2233

PACKAGING
5 ℓ, 20 ℓ

ALWAYS READ THE LABEL

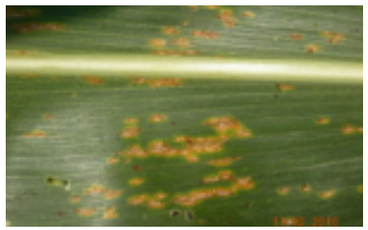
INDICATE 250 SC

FUNGICIDE

Active ingredient: Azoxystrobin 125g + epoxiconazole 125g per litre
(Reg No. L9310, Act 36 of 1947)

A suspension concentrate systemic action fungicide for the preventative control of diseases in maize.



Features

- INDICATE 250 SC is a FRAC group code 11 and 3 fungicide.
- INDICATE 250 SC has a contact and systemic action.
- Two active ingredients (azoxystrobin and epoxiconazole with different modes of action.
- Azoxystrobin belongs to the strobilurin group of fungicides. Part of the QoI group of fungicides.
- Azoxystrobin exhibits excellent spore germination inhibition by blocking the mitochondrial electron transport of fungi.
- As a triazole fungicide, Epoxiconazole is systemic and actively stops the production of new fungal spores by inhibiting the biosynthesis of existing fungal cells within the host plant.
- INDICATE 250 SC has a contact and systemic action and is effective against germination of spores and early fungal growth, thereby reducing secondary infection.
- INDICATE 250 SC is compatible with the Villa surfactant DIRECT.
- Apart from fungicidal activity, research has shown that strobilurins can increase physiological effects, which is beneficial to the crop.

Do's and don'ts

- INDICATE 250 SC is recommended in an integrated disease management programme.
- In order to achieve consistent and reliable disease control, preventive fungicide applications are critically important.
- Apply the first application of INDICATE 250 SC at the 5 to 6 leaf stage before any disease symptoms are noticed.
- A second application of INDICATE 250 SC is recommended 3 weeks later.

USE RATE†
- **Grey leaf spot *(Cercospora zeae-maydis)*; Northern leaf blight (Exserohilum turcicum); Rust *(Puccinia sorghi)*:**
800 mℓ/ha INDICATE 250 SC + DIRECT 50 mℓ/ 100ℓ

REGISTRATION DETAILS†
INDICATE 250 SC
Active ingredient: Azoxystrobin 125g + epoxiconazole 125g per litre
(Reg. No. L9310 Act 36 of 1947)
(caution)

Registration holder:
Universal Crop Protection (Pty) Ltd.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

DIRECT
Active ingredient: Polyether-polymethylsiloxane-copolymer 300 g/ℓ and vegetable oil 650 g/ℓ
Reg. No. L8680, Act 36 of 1947
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
5 ℓ, 20 ℓ

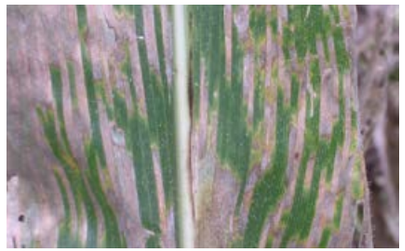
ALWAYS READ THE LABEL

MYCOBLOCK 250 SC

FUNGICIDE

Active ingredient: Azoxystrobin (strobilurin) 250 g/ℓ
(Reg. No. L8591, Act 36 of 1947)

A suspension concentrate, systemic fungicide with contact and translaminar action for the control of grey leaf spot, rust and Northern leaf blight in maize.



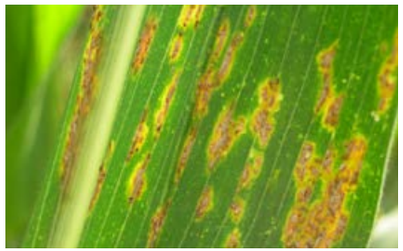


Photo 1: Northern leaf blight on maize.
Photo 2: Grey leaf spot on maize
Photo 3: Leaf rust on maize.

Features

- MYCOBLOCK 250 SC is a FRAC group code 11 fungicide.
- Inhibits mitochondrial respiration in fungi.
- MYCOBLOCK 250 SC controls grey leaf spot, rust and Northern leaf blight in maize.
- MYCOBLOCK 250 SC has a locally systemic (translaminar) action.
- Effective against germination of spores and early fungal growth, therefore reduces secondary infection.
- Must be used preventively or as early as possible in the disease cycle.
- Little or no effect after fungus has established within the leaf tissue.
- MYCOBLOCK 250 SC is a preferred product for use in combination with other products used in a programme. (eg. triazole – difenoconazole).
- Forms a vital part of an anti-resistance strategy.

Do's and don'ts

- Apply only in a tank mixture with SANTANA 480 SC plus DIRECT.
- Apply the first application of MYCOBLOCK 250 SC before any disease symptoms are noticed.
- A second application of the MYCOBLOCK 250 SC tank-mix is recommended 3 to 4 weeks later.
- Do not apply more than 3 (three) sprays per season, and always alternate with or use in combination with other registered triazoles (difenoconazole).
- Do not mix MYCOBLOCK 250 SC with any heavy metal containing products.

USE RATE†
- MYCOBLOCK 250 SC 400 mℓ /ha + SANTANA 140 mℓ/ha + 50 mℓ/100 ℓ water DIRECT; Apply in 300-500 ℓ water per hectare (Ground application)
- MYCOBLOCK 250 SC 400 mℓ /ha + SANTANA 140 mℓ/ha + 100 mℓ/100 ℓ water DIRECT; Apply in 30-40 ℓ water per hectare (Aerial application)

REGISTRATION DETAILS†
MYCOBLOCK 250 SC
Active ingredient: Azoxystrobin (strobilurin) 250 g/ℓ
Reg. No. L8591, Act 36 of 1947
(caution)

DIRECT
Active ingredient: Polyetherpolymethylsiloxanecopolymer 300 g/ℓ and vegetable oil 650 g/ℓ
Reg. No. L8680, Act 36 of 1947
(caution)

SANTANA 480 SC
Active ingredient: Prothioconazole (triazole) 480 g/ℓ
Reg. No. L10049, Act 36 of 1947
(harmful)

Registration holder:
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PACKAGING
4 ℓ

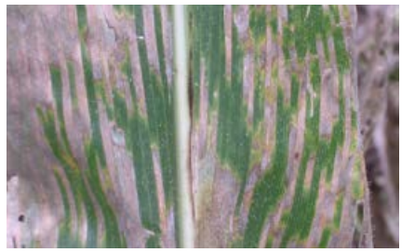
ALWAYS READ THE LABEL

SANTANA 480 SC

FUNGICIDE

Active ingredient: Prothioconazole (triazole) 480 g/ℓ
(Reg. No. L10049, Act 36 of 1947)

A suspension concentrate, systemic action fungicide for the preventative control of rust in maize.



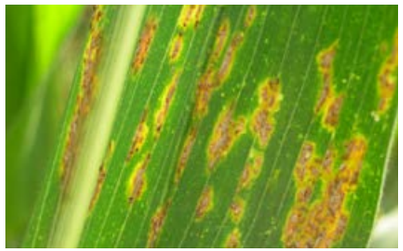


Photo 1: Northern leaf blight on maize.
Photo 2: Grey leaf spot on maize
Photo 3: Leaf rust on maize.

Features

- SANTANA 480 SC is a FRAC group code 3 fungicide.
- SANTANA 480 SC controls rust, grey leaf spot and Northern leaf blight in maize.
- Provides a high level of eradicative and protective control due to fast absorption with long lasting protection.
- Ideal mixing partner for picoxystobin (ACADAMY 250 SC).
- Low application rate results in less product required for similar efficacy compared to other triazoles.

Do's and don'ts

- Only apply in a tank mixture with ACADEMY 250 SC or MYCOBLOCK 250 SC
- Apply the first application of the SANTANA 480 SC tank-mix at the 5-6 leaf stage before any disease symptoms are noticed.
- A second application of the SANTANA 480 SC tank-mix is recommended 3 to 4 weeks later.
- Under expected high disease pressure conditions, a third application with SPARTA 375 SC is recommended.

USE RATE†
- SANTANA 480 SC 140mℓ/ha + ACADEMY 250 SC 400mℓ/ha + DIRECT Or
- SANTANA 140 mℓ/ha + MYCOBLOCK 250 SC 400 mℓ/ha plus DIRECT.
- DIRECT Apply in 300-500 ℓ water per hectare (Ground application).
- DIRECT Apply in 30-40 ℓ water per hectare (Aerial application).

REGISTRATION DETAILS†
SANTANA 480 SC
Active ingredient: Prothioconazole (triazole) 480 g/ℓ
Reg. No. L10049, Act 36 of 1947
(harmful)

ACADEMY 250 SC
Active ingredient: Picoxystrobin (strobilurin) 250 g/ℓ
Reg. No. L10034, Act 36 of 1947
(harmful)

DIRECT
Active ingredient:
Polyetherpolymethylsiloxanecopolymer
300 g/ℓ and vegetable oil 650 g/ℓ
Reg. No. L8680, Act 36 of 1947
(caution)

SPARTA 375 SC
Active Ingredient: flusilazole (triazole) 250 g/ℓ + carbendazim (benzimidazole) 125 g/ ℓ
Reg. No. L 8403 Act/Wet No. 36 of 1947

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

MYCOBLOCK 250 SC
Active ingredient: Azoxystrobin (strobilurin) 250 g/ℓ
Reg. No. L8591, Act 36 of 1947
(harmful)

Registration holder:
Universal Crop Protection (Pty) Ltd. Co.
Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620.
Tel. (011) 396-2233

PACKAGING
5 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

SPARTA 375 SC

FUNGICIDE

Active ingredient: Flusilazole (triazole) 250 g/ℓ & carbendazim (benzimidazole) 125g/ℓ)
(Reg No. L8403, Act 36 of 1947)

A suspension concentrate fungicide for the control of grey leaf spot *(Cercospora zeaemaydis)* and Northern leaf blight *(Exserohilum turcicum = Helminthosporium turcicum)* in maize.




Photo 1: Grey leaf spot on maize.
Photo 2: Grey leaf spot on maize.
Photo 3: Northern leaf blight on maize.
Photo 4: Northern leaf blight on maize.

Features

- SPARTA 375 SC is a FRAC group code 3 + 1 fungicide.
- SPARTA 375 SC has two active ingredients (flusilazole and carbendazim), with different modes of action.
- Rapid uptake by plant tissue.
- Highly effective fungicide for use in anti-resistance programmes.
- SPARTA 375 SC contains both a protective (preventative) and a post-infective (curative) action.

Do's and don'ts

- Apply preventatively at first signs of the disease.
- Second application 2 to 3 weeks later is mandatory if crop has not yet reached hard dough stage (in wet conditions, use shorter interval).

USE RATE†

Grey leaf spot:
- 500 mℓ/ha SPARTA 375 SC + DIRECT (at a higher risk disease incidence, apply 400 mℓ/ha MYCOBLOCK 250 SC at 6-leaf stage, 25 days after planting, followed by a tank-mixture of MYCOBLOCK 250 SC (400 mℓ/ha) plus SPARTA 375 SC 3 to 4 weeks later)

Northern leaf blight:
- 500 mℓ/ha SPARTA 375 SC + DIRECT (when a high disease risk occurs, apply 2 MYCOBLOCK 250 SC applications at 4 to 5 week intervals, followed by SPARTA 375 SC as last treatment 3 to 5 weeks after the second application)

REGISTRATION DETAILS†
- SPARTA 375 SC
  Active ingredient: Flusilazole (triazole) 250g/ℓ & carbendazim (benzimidazole) 125g/ℓ)
  (Reg. No. L8403 Act 36 of 1947)
  (caution)

- MYCOBLOCK 250 SC
  Active ingredient: Azoxystrobin (strobilurin) 250 g/ℓ
  (Reg. No. L8591 Act 36 of 1947)
  (harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Co. Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630
Tel: 011 396 2233

PACKAGING
5 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

ADJUVANT

Trade name	Active Ingriedient	Target Species
AQUABUFF PLUS	mixed organic buffer system and ethoxylate surfactant	A pH buffer with wetting and spreading properties for use with alkaline-sensitive agro-chemicals or agro-chemicals that require the use of a buffer.
CLASS ACT NG	ammonium sulphate and non-ionic surfactant	For use with water-sensitive herbicides like glyphosate and products that require the use of a surfactant and/or ammonium sulphate.
COMMODOBUFF	organic acid and alkali	Buffering agent for correction of ph.
DIRECT	polyether-polymethylsiloxane-copolymer, vegetable oils	A non-ionic adjuvant with spreading and penetrating properties for use with post- emergence agrochemical applications.
INTERLOCK	vegetable oils, polyoxy ethylene fatty acid esters	Deposition-agent adjuvant that improves spray deposition and canopy penetration while reducing spray drift and evaporation of spray droplets.
VELOCITY-DRYMAX	ammonium sulphate	Use with glyphosate to complex antagonistic ions in spray water.
VILLA 51	isotridecanol	A surfactant that increases the wetting and spreading properties of spray solutions and enhances the activity of various pesticides.

↑ **Click on product links above to get to more information on this product.**

AQUABUFF PLUS

Active ingredient: Mixed organic buffer system and alcohol ethoxylate surfactant 585 g/ℓ
(Reg No. L9210, Act 36 of 1947)

A pH buffer with wetting and spreading properties for use with alkaline-sensitive agro-chemicals or agro-chemicals that require the use of a buffer.

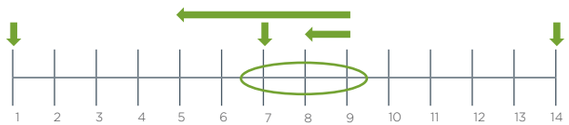

Figure 1: pH-Scale

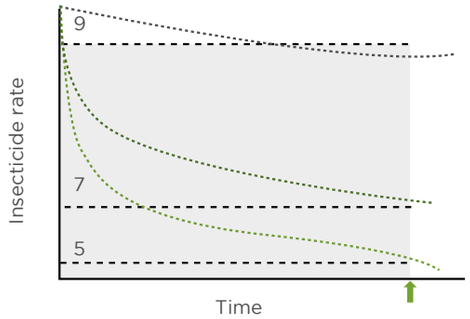

Figure 2: Alkaline hydrolysis

Features

- Used mainly to decrease alkaline hydrolysis (degradation of insecticides in high pH water).
- True buffer that reduces and stabilizes the spray solution pH to between 4 and 6 (typically pH 4.5 – 5.5), where most insecticides are most stable.
- Will not decrease the pH to extremely low levels, especially when using water with a low buffering capacity.
- Used mainly with insecticides that are prone to alkaline hydrolysis to extend the half-life in alkaline water.
- Contains a surfactant for improved retention and spreading of spray droplets.
- Rate calculation according to water analysis.

Do's and don'ts

- Add to the spray tank before the alkaline hydrolysis-sensitive insecticide.
- Do not use as a standard practice, but only when labels specifically recommend acidification.

ALWAYS READ THE LABEL

USE RATE†
- 0.04 – 0.1 % (40 – 100 mℓ /100 ℓ spray solution).
- Use the higher rate in water with a high alkalinity (buffering capacity) or when a water analysis indicates it.

REGISTRATION DETAILS†
AQUABUFF PLUS
Active ingredient: Mixed organic buffer system and alcohol ethoxylate surfactant 585 g/ℓ
Reg. No. L9210, Act 36 of 1947
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
5 ℓ and 20 ℓ

CLASS ACT NG

Active ingredient: Active ingredient: Ammonium sulphate + non-ionic surfactant 480 g/ℓ
(Reg L10477, Act 36 of 1947)

Class Act NG is an adjuvant that contains ammonium sulphate, a non-ionic surfactant and has humectant properties for use with water-sensitive herbicides like glyphosate and products that require the use of a surfactant and/or ammonium sulphate.

Figure 1: Faster & more effective glyphosate control

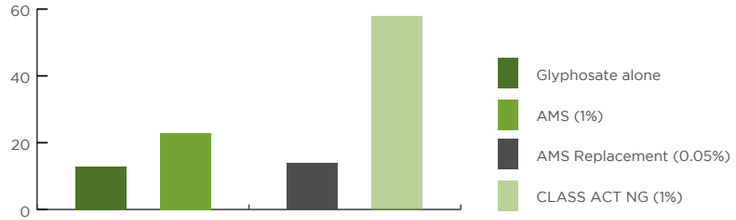

Figure 2: Rainfastness of glyphosate

Features

- Contains the patented CornSorb Technology.
- Highly extended droplet drying time.
- Moist droplet deposit increases absorption speed and amount.
- Contains a full rate of surfactant for droplet spreading and increased absorption.
- Faster control.
- More effective control on hardy weeds.
- Contains ammonium sulphate to negate salt antagonism.
- Registered with leading brand name glyphosate products.

Do's and don'ts

- Use with glyphosate and other salt-sensitive herbicides.
- Do not use as a standard practice with all herbicides.
- Add to the spray tank before the herbicide.

USE RATE†
- 1 – 2 % (1 – 2 ℓ /100 ℓ spray solution).
- For use with glyphosate and other herbicides that recommend the use of ammonium sulphate adjuvants.
- Use the higher rate in cases where additional coverage is required e.g. resilient weeds or weeds with hairy or waxy surfaces.
- Use the higher rate when spray water contains high levels of calcium, magnesium, sodium and potassium, therefore hard or brackish water.

REGISTRATION DETAILS†
CLASS ACT NG
Active ingredient: Ammonium sulphate 480g/ℓ
Reg. No. L10477, Act 36 of 1947
(caution)

Registration holder:
Winfield Solutions Registration Holdings (Pty) Ltd
Reg. No. 2015/312008/07
PO Box 10413, Aston Manor, 1630
Tel. (011) 396-2233

PACKAGING
10 ℓ

ALWAYS READ THE LABEL

COMMODOBUFF

Active ingredient: Organic acid and alkali 660 g/ℓ
(Reg No. L5390, Act 36 of 1947)

A buffering agent for the correction of the water pH in alkaline spray mixtures.

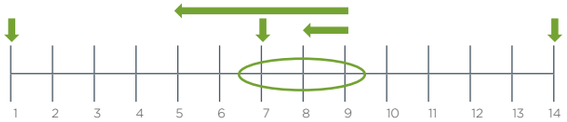

Figure 1: pH-Scale

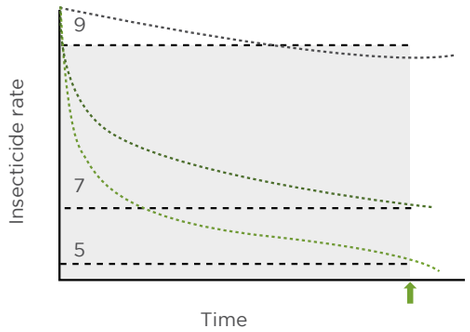

Figure 2: Alkaline hydrolysis

Features

- Used mainly to decrease alkaline hydrolysis (degradation of insecticides in high pH water).
- True buffer that reduces and stabilizes the spray solution pH to between 4 and 6 (typically pH 4.5 – 5.5), where most insecticides are most stable.
- Will not decrease the pH to extremely low levels, especially when using water with a low buffering capacity.
- Used mainly with insecticides that are prone to alkaline hydrolysis to extend the half-life in alkaline water.

Do's and don'ts

- Add to the spray tank before the alkaline hydrolysis-sensitive insecticide.
- Do not use as a standard practice, but only when labels specifically recommend acidification.

USE RATE†
- 0.05 – 0.1 %
  (50 – 100 mℓ/100 ℓ spray solution).
- Use the higher rate in water with a high alkalinity (buffering capacity)

REGISTRATION DETAILS†
COMMODOBUFF
Active ingredient: Organic acid and alkali 660g/ℓ
Reg. No. L5390, Act 36 of 1947
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
5 and 20 ℓ

ALWAYS READ THE LABEL

DIRECT

Active ingredient: polyether-polymethylsiloxane-copolymer 300 g/ℓ and vegetable oil 650 g/ℓ
(Reg No. L8680, Act 36 of 1947)

Direct is a non-ionic adjuvant with spreading and penetrating properties for use with postemergence crop protection product applications, especially fungicides.

Figure 1: Used with certain fungicides on diseases

Features

- Fungicide adjuvant, if label recommended.
- Excellent spreading.
- Assists with the absorption process.

Do's and don'ts

- Normally 0.05 % for ground and 0.1% for aerial fungicide applications.
- Use only if fungicide label specifically recommends an adjuvant.
- Add to the spray tank after the crop protection products.

USE RATE†
- 0.05 - 0.1 % (50 - 100 mℓ/100 ℓ spray solution).
- For use with fungicides.

REGISTRATION DETAILS†
DIRECT
Active ingredient: Polyether-polymethylsiloxane-copolymer 300 g/ℓ and vegetable oil 650 g/ℓ
Reg. No. L8680, Act 36 of 1947
(caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
1 and 5 ℓ

ALWAYS READ THE LABEL

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INTERLOCK

Active ingredient: Vegetable oils, polyoxy ethylene fatty acid esters 880 g/ℓ
(Reg No. L10254, Act 36 of 1947)

INTERLOCK is a deposition-agent adjuvant that improves spray deposition and canopy penetration while reducing spray drift and evaporation of spray droplets.

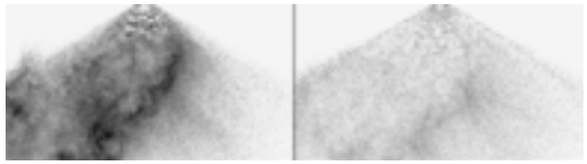

Figure 1: XR nozzle without and with INTERLOCK

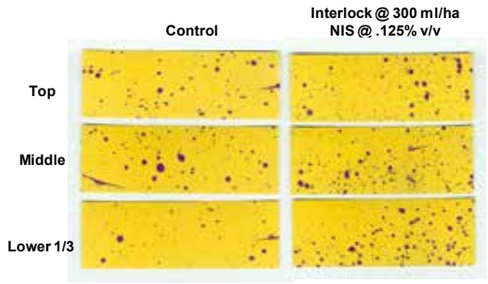

Figure 2: Depth of canopy penetration with Interlock applied to a canopied crop

Features

- Drastically reduces the ultra and very fine spray droplets.
- Increases mean droplet velocity at canopy height.
- Increases canopy penetration.
- Increases retention and coverage.
- Decreases drift and evaporation.
- Can be used with herbicides, fungicides and insecticides.
- Does not increase the spray solution viscosity.
- Suitable for both ground and aerial application.

Do's and don'ts

- Do not use with crop protection products that restrict the use of an adjuvant.
- Does not replace other adjuvants because it should be used in conjunction with the recommended adjuvant.
- Do not mix in an induction system or container when the products are undiluted.

USE RATE†
- 0.2 – 0.3 ℓ/ha Ground and > 0.5 % Aerial rates.
- Compatible with most commonly used crop protection products. However, a jar test is recommended prior to large scale mixing.
- Add after crop protection products or other adjuvants but prior to complete filling of the spray tank.
- Can be used with most Villa crop protection products.

REGISTRATION DETAILS†
INTERLOCK
Active ingredient: Vegetable oils, polyoxy ethylene fatty acid ester 880 g/ℓ
Reg. No. L10254, Act 36 of 1947
(caution)

Registration holder:
Winfield Solutions Registration Holdings (Pty) Ltd.
Reg. No. 2015/312008/07
PO Box 10413, Aston Manor, 1630
Tel. (011) 396-2233

PACKAGING
10 ℓ

ALWAYS READ THE LABEL

VELOCITY-DRYMAX

Active ingredient: Ammonium sulphate 1000 g/kg (Reg. No. L9454, Act 36 of 1947)

A granular formulation that will slightly reduce alkaline water pH, complex certain antagonistic ions in carrier water and enhance the activity and compatibility of foliar applied herbicides such as glyphosate.

Figure 1: Glyphosate alone and with VELOCITY-DRYMAX

Features

- Overcomes salt antagonism of glyphosate and other salt-sensitive herbicides.
- 100 % concentration dry formulation – less transport cost, less storage space.
- Rate calculation according to water analysis or EC.
- Registered with leading glyphosate brand names.

Do's and don'ts

- Add to the spray tank first, before glyphosate or any other sensitive herbicide.
- Pre-solubilize in a small amount of water before adding to the spray tank.
- It is not necessary to also add buffers to glyphosate spray solutions.
- There is no need to let the tank mixture stand for any period of time in order for the VELOCITY-DRYMAX to bind the antagonistic salts. The reaction occurs during droplet drying.

USE RATE†
- 0.25 - 1 % (0.25 – 1 kg/100 ℓ spray solution).
- If an EC measurement or water analysis is available, a calculated rate can be recommended.
- For use with glyphosate or any other herbicide that is antagonized by salts in carrier water.

REGISTRATION DETAILS†
VELOCITY-DRYMAX
Active ingredient: Ammonium sulphate 1000 g/kg
Reg. No. L9454, Act 36 of 1947 (caution)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
10 kg

ALWAYS READ THE LABEL

VILLA 51

Active ingredient: Isotridecanol (alkylpolyethylene glycol ether) 918 g/ℓ
(Reg. No. L8050 Act 36 of 1947)

VILLA 51 is a surfactant that increases the wetting and spreading properties of spray droplets and enhances the activity of various crop protection products.

Figure 1: Droplet spreading with VILLA 51 on the right

Features

- Standard surfactant in the industry.
- Excellent spreading.
- Registered with leading brand name crop protection products.

Do's and don't s

- Use with post-emerge herbicide applications.
- Do not use VILLA 51 with bromoxynil.
- Add to the spray tank after the crop protection products.

USE RATE†
- Normally 0.1 %
  (100 mℓ/100 ℓ spray solution).
- For use with herbicides excluding bromoxynil.

REGISTRATION DETAILS†
VILLA 51
Active ingredient: Isotridecanol
(alkylpolyethylene glycol ether) 918 g/ℓ
Reg. No. L8050, Act 36 of 1947
(harmful)

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
5 and 20 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

PLANT GROWTH REGULATOR

Trade name	Active Ingriedient	Target Species
KELPX5	Natural free indole acetic acids	Plant growth promoter

↑ **Click on product links above to get to more information on this product.**

KELPX-5

Active ingredient: Natural Free IAA
(IAA is the dominant natural free Auxin) 357 µg/kg
(Reg. No. M 24, Act 36 of 1947)

A natural plant growth promoter which improves root growth, crop growth and yields.

Features

- KELPX-5 is a concentrated kelp extract manufactured from *Ecklonia Maxima* kelp - known for its high auxin content, specifically Free IAA (Indole 3 Acetic Acid).
- Auxins improve cell wall elasticity and subsequent cell expansion, with Free IAA being a thousand times more effective than conjugated and bounded auxins.
- KELPX-5 is a super concentrate that can be used at a 5 times dilution or 1/5 dosage when compared to standard kelp extract dosages to obtain comparable results in general – making it very cost effective.
- Preserved without biocides. Once KELPX-5 is diluted in the spray medium, the bacteriostatic effect disappears, rendering beneficial microorganisms unharmed.
- KELPX-5 is compliant with almost all application methods: foliar spray, drip irrigation, in-furrow, through fertigation systems, soil drench, plant dip and seed treatment.

PLANT GROWTH REGULATOR

USE RATE†
- 4 mℓ / 10 ℓ water or 40 mℓ / 100 ℓ water.
- Standard industry application rate is 400 mℓ/ha.

REGISTRATION DETAILS†
KELPX-5
Active ingredient: Natural Free IAA
(IAA is the dominant natural free Auxin)
357 µg/kg
Reg. No. M 24, Act 36 of 1947.

Registration holder:
KelpX (Pty) Ltd
Reg. No. 2017/531270/07
PO Box 11355, Tiegerpoort, 0056
Tel: 060 913 9902

PACKAGING
20 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED

TANK CLEANER

Trade name	Active Ingriedient	Target Species
PROTANK LIQUID CLEANER	Proprietary blend of phosphate and carbonate salts, sequestering agents, surfactants and solvents.	Spray tank cleaner for commercial use on farm only

↑ Click on product links above to get to more information on this product.

PROTANK LIQUID CLEANER

Active ingredient: Proprietary blend of phosphate and carbonate salts, sequestering agents, surfactants and solvents 100%

Spray tank cleaner for commercial or farm use only.




Features

- Protank Liquid Cleaner decreases contamination when changing from one chemical to another.
- Assures accurate dosage by removing chemicals from the previous batch.
- Removes scale, dirt, etc.
- Protects pump and valves.
- Reduces strainer clogging.
- Minimizes nozzle wear.

Do's and don'ts

- Use a hand boom to wash down the tank interior and cover.
- Once the pump and interior has been cleaned, open boom valve and empty tank by spraying out through boom and nozzles.
- Take care to observe proper disposal of spray solution.
- Rinse tank by following the same procedure using water only.
- A three-minute rinse using cold water is necessary, however if you are changing over to a different chemical, a second rinse will lessen the chance of contamination.
- Use as directed but in addition allow the rinse solution to remain in the sprayer and its parts overnight.

USE RATE†

Large Tanks (380- 1100 ℓ)

- Close boom valve and add 190 ℓ water to tank, then turn on agitation and add 470 mℓ of PROTANK LUQUID CLEANER.

Smaller tanks

- Fill tank half full of water and use 25 mℓ or more for every 10 ℓ of tank volume.

REGISTRATION DETAILS†

PROTANK LUQUID CLEANER
Active ingredient: Proprietary blend of phosphate and carbonate salts, sequestering agents, surfactants and solvents.

Registration holder:
Villa Crop Protection (Pty) Ltd.
Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630.
Tel. (011) 396-2233

PACKAGING
1 ℓ

ALWAYS READ THE LABEL

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WINFIELD® UNITED