

BEFORE USING THIS PRODUCT READ THE LABEL CAREFULLY!

SHAKE THE BOTTLE WELL BEFORE USE.

Herbicide



METAFORCE 500 SC

Reg. No. L 8262 Act/Wet No. 36 of/van 1947

2: 7/6/2012 – May 2017

*A suspension concentrate herbicide for the pre-emergence and early post-emergence control of certain broad-leaved weeds and annual grasses in crops as indicated.*

*'n Suspensie konsentraat onkruidodder vir die vooropkoms en vroeë na-opkoms beheer van sekere breëblaaronkruidе en eenjarige grasse in gewasse soos aangedui.*

ACTIVE INGREDIENT / AKTIEWE BESTANDEEL

metazachlor (chloroacetamide) 500 g/l metazachloor (chloroasetamied)

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



**villa**

Registration holder / Registrasiehouer:

Villa Crop Protection (Pty) Ltd.

Co. Reg. No. / Mpy. Reg. Nr. 1992/002474/07

PO Box / Posbus 10413, Aston Manor, 1630

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UN Number: 3082

Willow Set & Print 011 394-4486



CAUTION  
VERSIGTIG



GEbruiksAANwysings INGESLUIT

VERWYS NA BESONDERHEDE  
GEDRUK OP HOUER/SAK

Date formulated:  
Formuleringsdatum:

DIRECTIONS FOR USE ENCLOSED

REFER TO DETAILS PRINTED  
ON CONTAINER/BAG

Batch number:  
Lotnommer:

**METAFORCE 500 SC**

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**VILLA CROP PROTECTION (PTY) LTD.**

Co. Reg. No. 1992/002474/07 Mpy. Reg. Nr.

PO Box / Posbus 10413

ASTON MANOR, 1630, Tel. (011) 396 2233

**CAUTION / VERSIGTIG****WARNINGS**

- Handle with care.
- Harmful when swallowed.
- Toxic to fish.
- Store in a cool, dry, well-ventilated place in the original container, tightly closed.
- Store away from food, feeds, seed, fertilizers and other agricultural remedies.
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: Do not enter treated area within 1 day after treatment unless wearing protective clothing.
- **In case of poisoning, take the person immediately to a physician and make this label available to him/her.**

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

**PRECAUTIONS**

- Avoid inhalation of spray mist.
- Avoid contact with skin and eyes.
- Wear a face shield, rubber gloves and boots, when handling the product and preparing the spray mixture.
- Wash with soap and water after use and after accidental skin contact.
- Wash contaminated clothing after use.
- Do not eat, drink or smoke whilst mixing or applying the product or before washing hands and face and change of clothing.
- Prevent spray drift onto other crops, grazing, rivers, dams or areas not under treatment or to nearby water sources.
- Do not apply where roots of desirable plants can absorb the chemical.
- Do not mix and load spray tanks within at least 15 metres of boreholes, streams, rivers and dams.
- Do not apply within at least 15 metres from boreholes, streams and rivers.
- Do not apply within at least 60 metres from dams.
- Ensure that no back-siphoning to boreholes or dams takes place where **Metazachlor** is applied through the irrigation system.
- Thoroughly clean the spraying equipment with clean water before using with other products and dispose of wash water where it will not contaminate food, grazing, boreholes, rivers or dams.
- **TRIPLE RINSE** empty containers in the following manner: Invert the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to a minimum of a third of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner.

- Destroy the empty container by perforation and flattening and dispose of it in a safe manner.
- **Never** re-use the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

### **RESISTANCE WARNING**

**METAFORCE 500 SC** is a group code K3 herbicide. Any weed population may contain individuals naturally resistant to **METAFORCE 500 SC** and other group code K3 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **METAFORCE 500 SC** or any other group code K3 herbicide.

To delay herbicide resistance:

- avoid exclusive repeated use of herbicides from the same herbicide group code. Alternate or tank mix with products from different herbicide group codes,
- integrate other control methods (chemical, cultural, biological) into weed control programmes.

For specific information on resistance management **contact the registration holder of this product.**

### **USE RESTRICTIONS**

#### **General:**

- **METAFORCE 500 SC** can damage crops on which it is registered, under the following conditions:
  - Application to poorly drained soils or soils with a compaction layer, which may lead to water logging.
  - Prolonged periods of cold, wet conditions or any other condition that places crop plants under stress.
  - Inbred parent lines or newly released cultivars. Consult your supplier in case of any uncertainty.
- Use restrictions for any herbicides used in combination with **METAFORCE 500 SC**, must be adhered to.

#### **Crop specific conditions:**

- **METAFORCE 500 SC** can only be applied pre-emergence of weeds in broccoli, cabbage, groundnuts, potatoes and soybeans.
- **Soybeans:**
  - **METAFORCE 500 SC** must not be applied pre-emergence in soybeans on soils with a clay percentage of less than 15 %. Refer to “**DIRECTIONS FOR USE**” for full details.
  - Only plant disease-free seed treated with a suitable registered seed treatment product.
  - Avoid soils with high levels of soil borne diseases.

### **DIRECTIONS FOR USE: Use only as indicated.**

#### **Compatibility:**

- The compatibility of **METAFORCE 500 SC** may be influenced by several factors. As these factors may vary, a physical compatibility test must always be performed before such a tank mixture is sprayed.
- If tank mixtures are to be used with other products, small quantities of the products in the correct ratio should be mixed with the appropriate quantity of water to determine compatibility.
- Water quality and formulation of other products may influence compatibility.
- When **METAFORCE 500 SC** is used in conjunction with any other agricultural remedy, adhere to all **WARNINGS, PRECAUTIONS** and **DIRECTIONS FOR USE** mentioned on that label.

#### **Mixing instructions:**

- Shake container well before use. Close container after use.
- Half fill the spray tank with clean water; add the required amount of **METAFORCE 500 SC** while maintaining agitation. Complete the filling operation.
- When mixing **METAFORCE 500 SC** with other herbicides in the same spray tank, use the following procedure:
  - a) fill spray tank three quarters with clean water. Add required amount of complementary herbicide to the water, agitating continuously,
  - b) continue filling the spray tank with water and add the required amount of **METAFORCE 500 SC** just before the tank is filled to its full capacity.
- Ensure thorough agitation of the mixture in the tank during mixing and spraying.
- Spray mixtures must be sprayed out immediately and not allowed to stand in the spray tank overnight.
- Thoroughly flush spraying equipment at the end of the spraying operation.

## APPLICATION RECOMMENDATIONS

- Use accurately calibrated equipment with properly arranged, suitable nozzles and an efficient agitation mechanism.
- Prepare a fine, even and firm seedbed free of weeds, trash and clods.
- Apply **METAFORCE 500 SC** or its tank mixtures preferably at planting or immediately after planting, but not later than 5 days after planting.
- Use 200 litres spray mixture per hectare for overall ground application.
- 10 to 20 mm rain within 7 to 10 days after application is necessary for good results. Do not use flood irrigation.
- Under dry conditions, weed seedlings may emerge. These are usually stunted and can be controlled with a shallow cultivation, which also mixes the herbicide with the top 10 to 20 mm of soil.

## APPLICATION RATES

<b>Crop</b>	<b>% Clay</b>	<b>Dosage rate (<math>\ell</math> / ha)</b>	<b>Remarks</b>	
<b>Broccoli</b>	< 10	0.8	Broadcast application, preferably immediately, but not later than 5 days after transplant onto a weed free seedbed. Only plant strong, healthy plants.	
	11 to 20	1.0		
	21 to 30	1.2		
	31 to 40	1.6		
	> 40	2.0		
<b>Cabbage</b>	< 10	0.8	Broadcast application, preferably immediately, but not later than 5 days after transplant on a weed free seedbed. Only plant strong, healthy plants.	
	11 to 20	1.0		
	21 to 30	1.2		
	31 to 40	1.6		
	> 40	2.0		
<b>Canola</b>	< 10	0.75	Broadcast application, preferably immediately after planting on a fine, even and firm seedbed, free of weeds.	
	11 to 20	1.0		
	21 to 30	1.2		
	31 to 35	1.3 to 1.6		
	36 to 40	1.4 to 1.6		
	> 40	1.6 to 1.9		
<b>Groundnuts</b>	< 10	0.75	Apply directly after planting and before the germinating seed crack the soil. <b>METAFORCE 500 SC</b> must not be applied post-emergence in groundnuts. For improved control of Yellow nutsedge, use the higher rates on heavier soils. Only use viable seed treated with a registered seed treatment.	
	11 to 20	1.0		
	21 to 30	1.2		
	31 to 35	1.3 to 1.6		
	36 to 40	1.4 to 1.6		
	> 40	1.6 to 1.9		
<b>Potatoes</b>	< 10 11 to 20 21 to 30 31 to 35 36 to 40 > 40	<b>Single application:</b>	Apply immediately after plant or after ridging, before germination of weeds. For improved control of broadleaf weeds, <b>Metribuzin 480 SC</b> formulations can be used at 1.1 litre per hectare in a tank mixture with <b>METAFORCE 500 SC</b> . Adhere to all directions for use and restrictions on the <b>Metribuzin</b> label. For improved control of Yellow nutsedge, use the higher rates on heavier soils.	
		0.75		
		1.0		
		1.2		
		1.3 to 1.6		
		1.4 to 1.6		
	1.6 to 1.9			
	< 10 11 to 20 21 to 30 31 to 35 36 to 40 > 40	<b>Split application:</b>		Apply the first application as described above. The second application should be done on a weed free surface after the last ridging operation, preferably as a directed spray to avoid the screening off of the spray droplets by the foliage.
		0.45 + 0.30		
		0.60 + 0.40		
		0.75 + 0.45		
		0.85 + 0.60		
1.00 + 0.60				
1.15 + 0.75				

<b>Crop</b>	<b>% Clay</b>	<b>Dosage rate (<math>\ell</math> / ha)</b>	<b>Remarks</b>
<b>Soybeans</b>	< 15	Not recommended	<b>METAFORCE 500 SC</b> is not recommended on soils with a clay content of less than 15 %. Apply immediately after planting, but before the soil is cracked by the germinating soybeans. Only use viable seed treated with a registered seed treatment.
	16 to 20	0.8	
	21 to 30	1.0	
	31 to 40	1.2	
	> 40	1.4	

**WEEDS CONTROLLED BY METAFORCE 500 SC****NOTE**

For the control of weeds not listed below, where **METAFORCE 500 SC** is tank mixed with other products, refer to the weed spectrum indicated on the label of the specific product.

<b>WEEDS NORMALLY CONTROLLED BY METAFORCE 500 SC AT THE RATES AS INDICATED IN THE APPLICATION TABLES:</b>	
<b>Botanical name</b>	<b>Common name</b>
<b>Grass weeds:</b>	
<i>Brachiaria eruciformis</i>	Sweet signal grass
<i>Chloris virgata</i>	Feather-top Chloris
<i>Digitaria sanguinalis</i>	Crab fingergrass
<i>Digitaria ciliaris</i>	Tropical fingergrass
<i>Echinochloa crus-galli</i>	Barnyard grass
<i>Eleusine coracana</i> (= <i>E. indica</i> )	Goose grass
<i>Lolium temulentum</i>	Darnel
<i>Panicum maximum</i>	Common buffalo grass
<i>Panicum schinzii</i>	Sweet buffalo grass
<i>Setaria pallide-fusca</i>	Red bristle grass
<i>Setaria verticillata</i>	Sticky bristle grass
<i>Urochloa panicoides</i>	Herringbone grass
<b>Broadleaf weeds:</b>	
<i>Amaranthus deflexus</i>	Perennial pigweed
<i>Amaranthus hybridus</i>	Cape pigweed
<i>Amaranthus spinosus</i>	Thorny pigweed
<i>Chenopodium album</i>	White goosefoot
<i>Chenopodium carinatum</i>	Green goosefoot
<i>Galinsoga parviflora</i>	Gallant soldier
<i>Nicandra physalodes</i>	Apple of Peru
<i>Portulaca oleracea</i>	Purslane
<i>Richardia brasiliensis</i>	Tropical Richardia
<i>Solanum nigrum</i>	Black nightshade

<b>WEEDS CONTROLLED EARLY IN THE SEASON:</b>	
<b>Botanical name</b>	<b>Common name</b>
<i>Acanthospermum hispidum</i>	Upright starbur
<i>Commelina benghalensis</i>	Benghal wandering Jew
<i>Tagetes minuta</i>	Khakiweed

<b>WEEDS THAT WILL ONLY BE CONTROLLED UNDER OPTIMUM CONDITIONS:</b>	
<b>Botanical name</b>	<b>Common name</b>
<i>Bidens pilosa</i>	Spanish blackjack
<i>Cyperus esculentus</i>	Yellow nutsedge
<i>Schkuhria pinnata</i>	Dwarf marigold

**Control of Yellow nutsedge (*Cyperus esculentus*):**

The control of Yellow nutsedge can be improved by the following conditions:

- The plant process must be preceded by a deep cultivation with a mould board plough.
- An even, fine and firm seedbed must be prepared.
- Application of the herbicide should be done within 7 to 10 days, followed by 10 to 20 mm rain or irrigation before germination of Yellow nutsedge, to leach the herbicide into the soil.
- Yellow nutsedge and other weeds already present at time of application will not be controlled.
- **METAFORCE 500 SC** should be applied during early spring for optimal control of Yellow nutsedge.