



# CYCLONE

BEFORE USING THIS PRODUCT, READ THE LABEL CAREFULLY

**CYCLONE** HERBICIDE

Reg. No. L8880, Act/Wet No. 36 of/van 1947

1:09/05/2012

A suspension concentrate herbicide for the pre- and post-emergence control of most annual grasses and broadleaf weeds in maize.

'n Suspensiekonsentraat onkruiddoder vir die voor- en na-opkoms beheer van meeste eenjarige grasse en breëblaaronkrude in mielies.

HRAC HERBICIDE GROUP CODE	F2	HRAC ONKRUIDDODERGROEPKODE
ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL		
Sulcotrione (triketone) 250 g/l		Sulkotrioon (triketoon)

Registration Holder / Registrasiehouer  
Meridian Agrochemical Company (Pty.) Ltd. / (Edms.) Bpk.  
Reg. No. 2000/010819/07  
P.O. Box / Posbus 436, Modderfontein, 1645, South Africa / Suid-Afrika

10ℓ

UN Number: 3082

CAUTION / VERSIGTIG

DIRECTIONS FOR USE ENCLOSED  
Batch Number  
Date of manufacture  
REFER TO DETAILS AS PRINTED  
ON CONTAINER / BAG

Meridian agritech

A row of five small square icons showing various safety symbols: a person in a hard hat, a hand being washed, a hand being dried, a hand being held, and a person sitting at a desk.

## **WARNINGS**

- Allow 70 days between last application and harvest of maize and sweetcorn.
- Handle with care.
- May cause eye and skin irritation as well as skin sensitisation.
- Store under lock and key in a cool place.
- Store away from food, feed, fertilizer and other agricultural products.
- Keep out of reach of children, uninformed persons and animals.
- **Aerial application:** Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings. Do not apply over water bodies and ensure that spray drift will not contaminate areas under treatment.

**Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be effective under all conditions. The activity 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 weed against the remedy, 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 by the user to follow the label instructions, or to the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.**

## **PRECAUTIONS**

- Do not inhale fumes or spray mist.
- Avoid skin and eye contact by wearing protective clothing when mixing the product.
- In case of accidental eye contact, flush with plenty of water and get medical attention if necessary.
- Wash with soap and water after use and accidental skin contact as well as contaminated clothing.
- Do not eat, drink or smoke while mixing or applying the product or before washing hands and face.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean applicator after use. Dispose of rinsate where it will not contaminate crops, grazing, rivers, dams and boreholes.
- Prevent contamination of food, feeds, drinking water and eating utensils.
- Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed to a drip. Thereafter rinse the empty container three times with a volume of water equal to a minimum of 10% of that of the container. Add the rinsate to the contents of the spray tank.
- Destroy the empty container and do not use for any other purpose.

## **USE RESTRICTIONS**

- Do not use **CYCLONE** on experimental or newly released cultivars/varieties without first consulting your supplier or the seed company concerned.
- Do not use **CYCLONE** on poorly drained soils or soils with a compaction layer, as under these conditions waterlogging can occur and the herbicide may cause crop injury.
- Do not apply **CYCLONE** to any crop or situation not mentioned in this instruction leaflet.
- Only apply **CYCLONE** using an accurate and safe application technique.
- Heavy rain on very sandy soils low in organic matter as well as flood irrigation can reduce weed control performance.
- Optimum weed control is obtained on a fine even seedbed, free of clods, trash and weeds. **CYCLONE** will also give weed control in stubble mulch or minimum tillage situations.
- If **CYCLONE** is used in a tank mix with other recommended herbicides, consideration should be given to the restrictions of those respective products.
- Use the lower rates on soils in the Northwest Province, North- and Western Free State.
- Use lower rates on lighter soils and where the weed population pressure is low.
- Make sure that sufficient fertilizer is applied and correctly placed at the time of planting to promote the growth of the seedlings.

**RESISTANCE WARNING:**

For resistance management **CYCLONE** is group code **F2** herbicide. Any weed population may contain individuals naturally resistant to **CYCLONE** and other group codes **F2** herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **CYCLONE** or any other group codes **F2** 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 the control methods (chemical, cultural, biological) into weed control programmes.

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

**Follow-on crops:**

To avoid damage to follow-up crops, the following waiting periods should be adhered to:

Maize and Sweet corn	Nil
Grain Sorghum	1 month
Sunflowers, Groundnuts, Soya beans, Potatoes, Dry beans, Forage Sorghum and Cotton	3 months
<b>CYCLONE</b> plus <b>PREFIX S EC</b> Sunflowers, Wheat, Broccoli, Carrots, Lucerne, Cucurbits, Tobacco, Green beans, peas (less than 400 ml) and Green peppers	4 months
Other Small grains and Peas	18 months
All Other Crops	24 months

**NOTE:** The waiting periods mentioned are only valid if the correct amount of **CYCLONE** plus mixture products have been applied and normal or above normal rains occurred during the season, and normal cultivation practices carried out. In the case of 'All Other Crops' a test planting is recommended in all cases.

**DIRECTIONS FOR USE Use only as directed****MIXING INSTRUCTIONS**

Half-fill the spray tank with suitable water, then add the required amount of **CYCLONE** to the water in the tank while agitating. Fill the spray tank to the desired volume. Should tank mixtures with other herbicides be made, follow the respective manufacturers' label recommendations. **Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank overnight.** Spraying equipment must be thoroughly flushed out at the end of the spraying operation.

**COMPATIBILITY**

The compatibility of **CYCLONE** with other products depends on the formulations of the respective products as well as the quality of the spray water to be used. As formulations change from time to time it is recommended that a physical compatibility test be done prior to the tank mixture being made. **CYCLONE** is compatible with most pyrethroid insecticides, **PREFIX S EC**, **ATRAZINE 900WG** and **TROOPER SL**.

**APPLICATION METHODS**

Ensure that the equipment is correctly calibrated and is checked regularly during application to ensure even and accurate application. Knapsack sprayers or tractor mounted boom sprayers may be used. A spray volume of 200-300 l/ha should be used for ground application and can be applied via flat fan-type nozzles, preferably the low drift type to avoid fine droplets. Use 40 l/ha for aerial application. **Constant agitation throughout the spray operation is essential.** Only clean water should be used.

Rain is essential to leach the product into the zone of the germinating weeds and therefore 10 –15 mm of rain or irrigation is needed within 7 days of application to ensure optimum results. Under drier conditions, weeds may emerge. These should be controlled with a shallow cultivation, which will also incorporate the herbicide into the upper 10 – 20 mm of soil. If soil crusting becomes a problem, rotary harrow in the same direction that the rows are planted, to assist maize germination. Harrowing after application may reduce weed control if untreated soil is thrown into deep planter furrows. Ensure that sufficient fertiliser is placed near the seed at planting to promote vigorous seedling growth.

Apply **CYCLONE** preferably with or directly after planting but not later than three days after planting. Always use the lower rates on lighter soils and where the weed pressure is lower.

#### **Ground application:**

**CYCLONE** may be applied with any properly calibrated medium or high volume sprayer which is equipped with an efficient agitation mechanism capable of adequate coverage and even distribution. Best results are obtained using flat fan-type spray nozzles and applying a minimum spray volume of 200 l/ha.

### **AERIAL APPLICATION**

Aerial application may only be done by a registered aerial application operator using a registered and correctly calibrated aircraft according to the instructions of SABS Code 0118 (Aerial Application of Agricultural Remedies). It is important to ensure that the spray mixture is distributed evenly over the target area and that the loss of spray material during application is restricted to a minimum. It is therefore essential that the following criteria be met;

#### **Equipment**

- Use suitable atomising equipment (hydraulic nozzles or rotary atomisers) that will produce the desired droplet size and coverage of the target area and will ensure the minimum loss of product through drift.
- The operator must use a nozzle set-up that will produce a droplet spectrum with the lowest possible relative span.
- All nozzles and atomisers should be positioned within the inner 75% of the wingspan to prevent droplets from entering the wingtip vortices.

#### **Application Parameters**

- A minimum volume of 40 l spray mixture per ha is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy nor be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended.
- A droplet coverage of 30 – 40 droplets per sq cm must be recovered at the target.
- A droplet spectrum with a VMD of 250 – 280 microns is recommended. Ensure that the production of fine droplets, with a VMD less than 150 microns, is restricted to a minimum.
- The height of the spray boom should be maintained at between 3 and 4m above the target.
- Do not spray when the aircraft is in a climb, at the top of a turn or during a dive or when banking.
- Apply before the crop growth becomes too dense, which will interfere with overall plant coverage.

#### **Meteorological Conditions**

- The difference between the wet and dry bulb readings as determined by a whirling hygrometer, must not exceed 8 °C.
- Do not spray under turbulent, unstable conditions nor during the heat of the day when rising thermals and downdraughts occur.
- Do not spray under temperature inversion conditions (spraying in or above the inversion layer).
- Do not spray when the wind speed exceeds 15 km per hour.

#### **General**

- Ensure that fields are accurately marked and that the aerial spray operator knows exactly which fields to spray.
- Obtain an assurance from the aerial spray operator that the above requirements will be met.

#### **Pre-emergence aerial application:**

- A minimum spray volume of 40 l/ha.
- A minimum of 20 to 30 droplets per cm<sup>2</sup> must be recovered on the target area.
- Employ a droplet spectrum with VMD of 450 micron. Ensure that the production of fine droplets (less than 150 microns with high drift and evaporation potential) is restricted to a minimum.

**Factors affecting weed control:**

- The performance of **CYCLONE** and its mixtures can be influenced by a number of factors which affect plant growth and therefore the herbicidal activity of the product. Factors such as soil pH, soil moisture, organic matter and weeds present may affect the residual action of the herbicide.
- Dry soil conditions after **pre-emergence** application may result in reduced control of germinating weeds. This can be corrected by surface blending or a post-emergence application of **CYCLONE** at the correct growth stage of the weeds and after rain.
- Continual overcast and rainy conditions after a **post-emergence** application may reduce the efficacy of the product.
- In areas with a high soil organic matter content the period of weed control may be shorter than indicated on the table.

**The period of weed control expected should be 4 – 8 weeks depending on cultivation practices above conditions and weed species present.**

- When a post-emergence application of **CYCLONE** is anticipated, avoid the following:
  - Stress conditions of weeds caused by drought, cold weather conditions, disease, insect damage, mineral element deficiencies and waterlogging.
  - Application to weeds beyond the optimum growth stage.
  - Application to weeds that are not actively growing.
- Should one or more of these conditions prevail at the time of a **CYCLONE** application, herbicidal efficacy may be reduced.

**MAIZE and SWEETCORN (excluding super sweet cultivars):**

- Use only the recommended quantities of tank mixture products as laid out in the tables below.
- Apply **CYCLONE** as a pre-emergence application at planting or in a herbicide programme, or as an early post-emergence spray to the weeds and crop.
- When **CYCLONE** is applied alone or **CYCLONE** plus **ACETAK EC** post-emergence, the addition of a suitable surfactant is recommended (only where emerged weeds are present). The addition of such a surfactant may cause temporary yellowing of maize when applied before the 4-leaf stage.
- When **CYCLONE** is applied post-emergence for difficult to control weeds, eg, *Tribulus terrestris*, *Commelina benghalensis* and *Ipomoea purpurea*, the addition of **TROOPER SL** at a rate of 350 – 500 mL per hectare is essential (Maize and sweet corn only). Refer to the **TROOPER SL** label for restrictions and conditions of use.
- There are no known cultivar restrictions for commercial maize. **CYCLONE** may be applied to the following sweetcorn varieties: Commander, Dynasty, Excellency, Jubilee RR, Melody, More, Napier, Rival, Shieldcrest, Sweety 82.
- PREFIX S EC** at planting is recommended if grasses are a problem followed up with **CYCLONE** plus **ATRAZINE 900WG** as an early post-emergence application to control the broadleaf weeds. Weeds which are beyond the optimum growth stage at time of application will not be controlled. Under conditions of high weed pressure and/or heavier soil always select the higher application rate.

**RECOMMENDATIONS**

**TABLE 1. CYCLONE** in tank mixture with **ATRAZINE 900WG** plus **PREFIX S EC** for broad spectrum pre-emergence weed control as a single application in maize.

CROP	%CLAY	DOSAGE RATE (ℓ/ha)		
		PREFIX S EC	ATRAZINE 900WG	CYCLONE
Maize Pre-emergence tank mixtures	0 – 10	0.5	0.17 – 0.47	0.25 – 0.7
	11 – 15	0.75	0.17 – 0.47	0.25 – 0.7
	16 – 20	0.9	0.33 – 0.5	0.5 – 0.75
	21 – 50	1.0	0.33 – 0.5	0.5 – 0.75

**Remarks**

- When applied pre-emergence, **CYCLONE** should be applied during or immediately after planting on a weed-free seedbed. The seedbed should ideally be fine and even without excessive crop residue to ensure the even distribution of **CYCLONE** on the soil surface.
- Where minimum tillage or stubble mulching is practised, weeds may already have come up at the time of planting. If maize or grainsorghum are planted under such circumstances, or if they are

planted into an old seedbed where grasses have already germinated and/or broadleaf weeds have developed past the four-leaf stage, it is recommended that paraquat be added to the **CYCLONE** spray solution, at a dosage rate recommended by the manufacturer. The paraquat will destroy the existing weeds and create a clean pre-emergence condition that will allow **CYCLONE** to work effectively.

**NOTE:**

1. When paraquat is added, the application must take place before the crop emerges otherwise paraquat will cause damage to the crop.
2. In case of minimum tillage or stubble mulching, the amount of stubble and organic material at the soil surface may reduce the efficacy of **CYCLONE**. The representative of the manufacturer or distributor should be consulted.
- **CYCLONE** can be used as a pre-emergence herbicide in tank mixtures with **PREFIX S EC** and **ATRAZINE 900WG**.
- **CYCLONE** and **ATRAZINE 900WG** can be used in a programme with **PREFIX S EC** where the **PREFIX S EC** is applied at planting followed by a **CYCLONE** plus **ATRAZINE 900WG** application pre-emergence of weeds.

**TABLE 2. CYCLONE** in tank mixture with **ATRAZINE 900WG** for broad spectrum postemergence weed control in maize.

CROP	DOSAGE RATE (ℓ/ha)	
	ATRAZINE 900WG	CYCLONE
<b>Maize</b> Post-emergence tank mixtures	0.27 – 0.47	0.4 – 0.7

**Remarks**

- The above application is recommended as a follow-up application to maize which has already been treated with a pre-emergence mixture containing a graminicide such as **PREFIX S EC** or **ULTRAMOC S EC**. Failure to apply such a pre-emergence treatment is likely to result in abnormal weed pressure with consequent weed competition and poor follow-up post-emergence results.
- The above mixture may be applied immediately following mechanical cultivation on a preemergence basis in which case no additional surfactant is required.
- For a post-emergence application, the maize must be at least in the 4-leaf stage.
- Should cold and wet weather conditions prevail or occur during or shortly after application of **CYCLONE**, chlorosis may occur but yield should not be affected.
- Broadleaf weeds should not be further developed than the 4-leaf stage and grasses not further than the 3-leaf stage should they be present at the time of application.
- A registered surfactant with penetrant activity such as Solitaire, Performer and Penetrex must be added to the spray mixture for all post-emergence applications where weeds have already emerged.
- The dosage rate selected from the table above is purely dependent upon weed species to be controlled and duration of control required.

**NOTE: TABLE 1. and TABLE 2.** can be used as a program where **CYCLONE**, **ATRAZINE 900WG** and **PREFIX S EC** are applied together pre-emergence of maize and weeds and then followed up with **CYCLONE** and **ATRAZINE 900WG** on a post-emergence of maize basis at the rates given in the tables above.

**TABLE 3. CYCLONE** in tank mixture with **ATRAZINE 900WG** and **ACETAK EC** for broad spectrum post-emergence weed control in maize.

CROP	DOSAGE RATE (ℓ/ha)		
	ATRAZINE 900WG	CYCLONE	ACETAK EC
<b>Maize</b> Post-emergence tank mixtures	0.27 – 0.47	0.4 – 0.7	0.18 – 0.35

**Remarks**

- The above application is recommended as a follow-up application to maize which has already been treated with a pre-emergence mixture containing a graminicide such as **PREFIX S EC** or **ULTRAMOC XTRA EC**. Failure to apply such a pre-emergence treatment is likely to result in

abnormal weed pressure with consequent weed competition and poor follow-up post-emergence results.

- The above mixture may be applied immediately following mechanical cultivation on a preemergence basis in which case no additional surfactant is required.
- For a post-emergence application, the maize must be at least in the 4-leaf stage.
- Should cold and wet weather conditions prevail or occur during or shortly after application of **CYCLONE**, chlorosis may occur but yield should not be affected.
- Broadleaf weeds should not be further developed than the 4-leaf stage and grasses not further than the 3-leaf stage should they be present at the time of application.
- A registered surfactant with penetrant activity such as Solitaire, Performer and Penetrex must be added to the spray mixture for all post-emergence applications where weeds have already emerged.
- The dosage rate selected from the table above is purely dependent upon weed species to be controlled and duration of control required.

**TABLE 4. CYCLONE** in tank mixture with **TROOPER SL** for broad spectrum post-emergence weed control in maize.

CROP	DOSAGE RATE (ℓ/ha)		
	TROOPER SL	CYCLONE	ATRAZINE 900WG
<b>Maize</b> Post-emergence tank mixtures	0.35 – 0.5	0.4 – 0.7	0.27 – 0.47

#### Remarks

- The above application is recommended as a follow-up application to maize which has already been treated with a pre-emergence mixture containing a graminicide such as **PREFIX S EC** or **ULTRAMOC XTRA EC**. Failure to apply such a pre-emergence treatment is likely to result in abnormal weed pressure with consequent weed competition and poor follow-up post-emergence results.
- The above mixture may be applied immediately following mechanical cultivation on a preemergence basis in which case no additional surfactant is required.
- For a post-emergence application, the maize must be at least in the 4-leaf stage.
- Should cold and wet weather conditions prevail or occur during or shortly after application of **CYCLONE**, chlorosis may occur but yield should not be affected.
- Broadleaf weeds should not be further developed than the 4-leaf stage and grasses not further than the 2-3-leaf stage should they be present at the time of application.
- A registered surfactant with penetrant activity such as Solitaire, Performer and Penetrex must be added to the spray mixture for all post-emergence applications where weeds have already emerged.
- The dosage rate selected from the table above is purely dependent upon weed species to be controlled and duration of control required.

Consult **TROOPER SL** label for the list of weeds for which control can be expected.

#### **WEEDS CONTROLLED BY CYCLONE PLUS ATRAZINE 900WG PLUS PREFIX S EC (TABLE 1):**

Perennial pigweed	<i>Amaranthus deflexus</i>
Common pigweed	<i>Amaranthus hybridus</i>
White goosefoot	<i>Chenopodium album</i>
Feathertop chloris	<i>Chloris virgata</i>
Spindlepod	<i>Cleome monophylla</i>
Cosmos	<i>Cosmos bipinnatus</i>
Mealie Crotalaria	<i>Crotalaria sphaerocarpa</i>
Large Thorn apple	<i>Datura ferox</i>
Crab fingergrass	<i>Digitaria sanguinalis</i>
Goose grass	<i>Eleusine indica</i>
Gisekia	<i>Gisekia pharnaceoides</i>
Common peppercress	<i>Lepidium africanum</i>
Apple-of-Peru	<i>Nicandra physaloides</i>
Common purslane	<i>Portulaca oleracea</i>

-	<i>Spermacoce sinensis</i>
Khaki weed	<i>Tagetes minuta</i>
Large carrotseed grass	<i>Tragus racemosus</i>

**Where the higher rates are used the following weeds may be additionally controlled:**

Upright starbur	<i>Acanthospermum hispidum</i>
Thorny pigweed	<i>Amaranthus spinosus</i>
Common blackjack	<i>Bidens pilosa</i>
Sweet signal grass	<i>Brachiaria eruciformis</i>
Cassia	<i>Cassia spp</i>
Green goosefoot	<i>Chenopodium carinatum</i>
Spiny emex	<i>Emex australis</i>
Kenaf	<i>Hibiscus cannabinus</i>
Bladderweed	<i>Hibiscus trionum</i>
Italian ryegrass	<i>Lolium multiflorum</i>
Lucerne	<i>Medicago sativa</i>
Sweet buffalo grass	<i>Panicum schinzii</i>
Wild gooseberry	<i>Physalis angulata</i>
Wild radish	<i>Raphanus raphanistrum</i>
Tropical richardia	<i>Richardia brasiliensis</i>
Dwarf marigold	<i>Schkuhria pinnata</i>
Red bristle grass	<i>Setaria pallide-fusca</i>
Heartleaf sida	<i>Sida cordifolia</i>
Nightshade	<i>Solanum nigrum</i>
Dubbeltjie	<i>Tribulus terrestris</i>
Herringbone grass	<i>Urochloa panicoides</i>

**WEEDS CONTROLLED BY CYCLONE PLUS ATRAZINE 900WG PLUS PREFIX S EC (TABLE 2.):**

Perennial pigweed	<i>Amaranthus deflexus</i>
Common pigweed	<i>Amaranthus hybridus</i>
White goosefoot	<i>Chenopodium album</i>
Feathertop chloris	<i>Chloris virgata</i>
Benghal wandering Jew	<i>Commelina benghalensis</i>
Large Thorn apple	<i>Datura ferox</i>
Thorn apple	<i>Datura stramonium</i>
Crab fingergrass	<i>Digitaria sanguinalis</i>
Bladderweed	<i>Hibiscus trionum</i>
Apple-of-Peru	<i>Nicandra physaloides</i>
Dwarf marigold	<i>Schkuhria pinnata</i>
-	<i>Spermacoce senensis</i>
Khaki weed	<i>Tagetes minuta</i>

**The following weeds may be controlled in addition to the above when ACETAK EC is added at the recommended rate:**

Thorny pigweed	<i>Amaranthus spinosus</i>
Cosmos	<i>Cosmos bipinnatus</i>
Goose grass	<i>Eleusine indica</i>
Gallant soldier	<i>Galinsoga parviflora</i>
Sweet buffalo grass	<i>Panicum schinzii</i>
Common purslane	<i>Portulaca oleracea</i>
Sticky bristle grass	<i>Setaria verticillata</i>

Dubbeltjie	<i>Tribulus terrestris</i>
Herringbone grass	<i>Urochloa panicoides</i>

**NOTES:**

The variable control of weeds mentioned directly above is dependent upon environmental conditions and rate of application. The pre-emergence control of *Cyperus esculentus* is dependent on the following:

- Where a dosage choice is given, use the higher rate.
- Planting into a firm and fine seedbed must be preceded by a deep ploughing.
- **ULTRAMOC XTRA EC** or **PREFIX S EC** must be applied within 2 days after planting.
- Sufficient continual soaking rain or irrigation (at least 15 mm on light soils and 25 mm on heavy soils) must fall within 7 days of spraying to leach the herbicide into the germination zone.

The registration holder does not accept any liability in respect of the control of unlisted weeds.

## WAARSKUWINGS

- Laat 70 dae toe tussen die laaste toediening en oes van mielies en suikermielies.
- Mag oog en vel irriteer, sowel as velinflammasie en jeukerigheid veroorsaak.
- Bêre agter slot-en-grendel in 'n koel plek.
- Bêre weg van voedsel, voer, kunsmis en ander landbouprodukte.
- Hou buite bereik van kinders, oningesigte persone en diere.
- **Lugtoediening:** Stel alle inwoners in die onmiddellike omgewing van die gebied wat bespuit gaan word in kennis en reik die nodige waarskuwings uit. Moet nie oor wateroppervlaktes sput nie en tref voorsorg dat die sputnewel nie aangrensende gebiede besoedel nie.

Alhoewel hierdie middel omvattend onder 'n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie. Die werking en doeltreffendheid daarvan kan beïnvloed word deur faktore soos abnormale grond-, klimaats- en bergingstoestande, kwaliteit van verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui word nie en die voorkoms van weerstand van die onkruid teen die betrokke middel, sowel as die metode, tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei en die omgewing of vir nadelige invloede op mens of dier of vir 'n gebrek aan prestasie van die betrokke middel as gevolg van versuum van die gebruiker om die etiketaanwysings na te kom, of as gevolg van ontstaan van toestande wat nie kragtens die registrasie voorsien kon word nie. Raadpleeg die verskaffer in die geval van enige onsekerheid.

## VOORSORGMAATREËLS

- Moet nie dampe of sputnewel inasem nie.
- Vermy kontak met die vel en oë deur beskermende oorklere te dra wanneer die produk gemeng word.
- In die geval van oogkontak, spoel oë met baie water en kry mediese hulp indien nodig.
- Was met seep en water na gebruik en toevallige velkontak en was ook besoedelde klere.
- Moet nie eet, drink of rook tydens vermenging of toediening van die produk of voordat hande en gesig gewas is nie.
- Vermy wegdrywing van sputnewel na ander gewasse, weiding, riviere, damme en areas wat nie onder behandeling is nie.
- Maak toedieningsapparaat skoon na gebruik. Raak ontslae van spoelwater waar dit nie gewasse, weiding, riviere, damme en boorgate sal besoedel nie.
- Voorkom die besoedeling van voedsel, voer, drinkwater en eetgerei.
- Keer die leë houer om oor die sput- of mengtenk en dreineer vir minstens 30 sekondes nadat die vloeistof tot 'n drup afneem. Spoel daarna die leë houer **drie keer** uit met 'n volume water gelykstaande aan 'n minimum van 10% van die inhoud van die houer. Gooi die spoelwater by die inhoud van die sputtenk.
- Vernietig die leë houer en moenie vir enige ander doel gebruik nie.

## GEBRUIKSBEPERKINGS

- Moet nie **CYCLONE** op eksperimentele of nuut vrygestelde kultivars/variëteite gebruik alvorens die vervaardigers of saadverspreiders geraadpleeg is nie.
- Moet nie **CYCLONE** op swak gedreineerde grond of grond met 'n kompaksielaag toedien nie. Die onkruiddoder mag tydens versuiptoestante skade aan gewasse veroorsaak.
- Moet nie **CYCLONE** op enige gewas of situasie toedien wat nie op hierdie etiket verskyn is nie.
- Dien **CYCLONE** slegs toe met akkurate en veilige toedieningsmetodes.
- Swaar reën op sandgronde met 'n lae organiese materiaalinhou, sowel as vloedbesproeiing, mag tot verminderde onkruidbeheer lei.
- Optimale onkruidbeheer word verkry op 'n fyn, gelyk saadbed wat vry van kluite, plantreste en onkruid is. **CYCLONE** sal ook onkruid beheer waar minimum- of deklaagbewerking toegepas word.
- As **CYCLONE** met ander tenkmengsels gebruik word, moet die gebruiksbeperkings van daardie betrokke produkte gevolg word.
- Gebruik die laer dosis op grond in die Noordwes Provincie, Noord- en Wes-Vrystaat.
- Gebruik die laer dosis op liger gronde en waar die onkruidpopulasiedruk nie so hoog is nie.

- Verseker dat voldoende kunsmis toegedien word en korrek by planttyd neergesit word om die groei van die saailinge te bevorder.

## **WEERSTANDSWAARSKUWING**

Vir weerstandsbestuur is **CYCLONE** 'n groepkode **F2** onkruiddoder. Enige onkruidpopulasie mag individue insluit wat 'n natuurlike weerstand teen **CYCLONE** en enige ander groepkodes **F2** onkruiddoder het. Die weerstandbiedende individue kan uiteindelik die onkruidpopulasie oorheers indien hierdie onkruiddoders herhaaldelik aangewend word. Hierdie weerstandbiedende onkruide sal waarskynlik nie deur **CYCLONE** of enige ander Groepkodes **F2** onkruiddoder beheer word nie.

### **Om weerstand teen onkruiddoders te vertraag:**

- Vermy die eksklusieve herhaaldelike gebruik van onkruiddoders in dieselfde groepkode. Wissel af met, of gebruik tenkmengsels van, produkte van verskillende onkruiddodergroepkodes.
- Integreer ander beheermaatreëls (chemies, verbouing, biologies) in onkruidbeheerprogramme.

Vir spesifieke inligting oor weerstandsbestuur, kontak die registrasiehouer van hierdie produk.

### **Opvolggewasse:**

Om skade aan opvolggewasse te voorkom, moet die volgende wagperiodes nagekom word:

Mielies en Suikermielies	Nul
Graansorghum	1 maand
Sonneblomme, Grondbone, Sojabone, Aartappels, Droë bone, Voersorghum en Katoen	3 maande
<b>CYCLONE ELITE plus PREFIX S EC</b> Sonneblomme, Koring, Spruitkool (Broccoli), Wortels, Lusern, Pampoengewasse, Tabak, Groenbone, Ertjies (dosis minder as 500 ml) en Groen Soetrissies	4 maande
Ander Kleingrane en Ertjies	18 maande
Alle ander Gewasse	24 maande

**Nota:** Die bogenoemde wagperiodes geld slegs indien die korrekte hoeveelheid **CYCLONE** plus mengselprodukte toegedien is en normale of meer as die normale reënval gedurende die seisoen voorgekom het en normale boerderypraktyke toegepas is. In die geval van "Alle ander Gewasse" word 'n planttoets in alle gevalle aanbeveel.

## **GEBRUIKSAANWYSINGS**

**Gebruik slegs soos aangedui.**

### **MENGINSTRUKSIES**

Maak die spuittenk halfvol met geskikte water en voeg die benodigde hoeveelheid van **CYCLONE** by die water in die tenk terwyl dit geroer word. Vul die spuittenk tot die verlangde volume. As tenkmengsels met ander onkruiddoders gemaak word, moet die betrokke vervaardiger se etiket gevolg word. **Die tenkmengsels moet onmiddellik uitgespuit word en nie toegelaat word om oornag in die spuittenk te staan nie.** Die spuittoerusting moet aan die einde van toediening deeglik uitgespoel word.

### **VERENIGBAARHEID**

Die verenigbaarheid die **CYCLONE** met ander produkte hang van die formulerings van die betrokke produkte af, asook van die kwaliteit van die spuitwater. Omdat formulerings van tyd tot tyd verander, word dit aanbeveel om 'n fisiese verenigbaarheidstoets te doen voordat die tenkmengsel gemaak word. **CYCLONE** is verenigbaar met die meeste piretroïedinsekoders, **PREFIX S EC, ATRAZINE 900WG** en **TROOPER SL**.

### **TOEDIENINGSMETODES**

Maak seker dat die spuittoerusting korrek gekalibreer is en gereeld nagegaan word tydens toediening om egalige en akkurate toediening te verseker. Rugsakspuite of konvensionele trekkergemonteerde balkspuite kan gebruik word. 'n Spuitvolume van 200-300 l/ha moet gebruik word vir grondtoediening en dit kan toegedien word met platwaaierspuitpunte, verkieslik die lae wegdrywingstipe wat fyn

druppelvorming verhoed. Gebruik 40 ℓ/ha vir lugtoediening. **Konstante roering regdeur die spuitoperasie is noodsaaklik.** Gebruik net skoon water vir toediening.

Reënval is noodsaaklik om die produk na die sone waar die onkruide ontkiem te loog en daarvoor is 10 - 15 mm reën of besproeiing nodig binne 7 dae na toediening, om optimale resultate te verseker. Onder droë toestande mag onkruidsaailinge opkom. Dié onkruide kan vernietig word deur 'n vlak bewerking wat selfdertyd die onkruiddoder met die boonste 10 - 20 mm grondlaag vermeng.

Indien korsvorming 'n probleem word moet 'n roltandeg in dieselfde rigting as die plantrye gebruik word om die ontkieming van die mielies te bevorder. Skoffelbewerking na toediening mag onkruidbeheer benadeel wanneer onbehandelde grond na die oppervlak gebring word. Verseker dat voldoende kunsmis naby die saad geplaas word om kragtige saailinggroei te bevorder.

**CYCLONE** moet verkieslik met of net na aanplanting toegedien word, maar nie later as drie dae na aanplanting nie. Gebruik altyd die laer dosis op ligte grond en wanneer die onkruiddruk laag is.

### GRONDOEDIENING

**CYCLONE** kan met enige behoorlike gekalibreerde medium tot hoë-volume spuit toegedien word wat toegerus is met 'n doeltreffende roermeganisme wat egalige bedekking sal verseker. Die beste resultate word verkry deur die gebruik van platwaaierspuitpunte in 'n minimum spuitvolume van 200 ℓ/ha.

### LUGTOEDIENING

Lugtoediening mag slegs deur 'n geregistreerde lugbespuitingsoperator met 'n korrek gekalibreerde, geregistreerde vliegtuig volgens die instruksies van SANS Kode 10118 (Aerial Application of Agricultural Pesticides) gedoen word. Dit is belangrik om te verseker dat die spuitmengsel eweredig oor die teikenarea versprei word en dat die verlies aan spuitmengsel tydens toediening tot 'n minimum beperk word. Dit is dus noodsaaklik om aan die volgende vereistes te voldoen:

#### Toerusting

- Gebruik gesikte atomiseringsapparaat (hidroiese of roterende spuitkoppe) wat die vereiste druppelgrootte en bedekking van die teikenarea sal produseer, maar wat die minste verlies van produk deur wegdrywing sal verseker.
- Die operator moet 'n spuitstelsel gebruik wat 'n druppelspektrum met die kleinste moontlike relatiewe span sal produseer.
- Al die spuitkoppe en atomiseerders moet in die binneste 75% van die vlerkspan geplaas word om die beweging van druppels binne-in die vlerkpuntvorteeks te beperk.

#### Toedieningsvereistes

- 'n Minimum volume van 40 ℓ spuitmengsel per ha word aanbeveel. Aangesien hierdie produk nie teen 'n verlaagde volume getoets is nie, kan die registrasiehouer nie effektiwiteit waarborg, of verantwoordelik vir enige nadelige effekte ervaar, gehou word indien hierdie produk teen 'n laer volume, as hierbo aanbeveel, uit die lug toegedien word nie.
- 'n Druppelbedekking van 30 - 40 druppels per vierkante cm moet op die teikenarea herwin word.
- 'n Druppelspektrum met 'n VMD van 250 - 280 mikron word aanbeveel. Verseker dat die produksie van fyn druppels, die wat kleiner as 150 mikron is, tot 'n minimum beperk word.
- Die hoogte van die spuitbalk moet tussen 3 en 4m bokant die teiken gehandhaaf word.
- Moet nie spuit wanneer die vliegtuig besig is om te klim, te duik, te draai of terwyl dit uitklim nie.
- Dien toe voordat die gewas te dig(ruig) word, aangesien dit die algehele bedekking sal beïnvloed.

#### Meteorologiese toestande

- Die verskil tussen die nat-en droëboltermometer lesings, soos deur 'n swaaihigrometer bepaal, moet nie 8 °C oorskry nie.
- Moet nie tydens turbulente en onstabiele weerstoestande of gedurende die hitte van die dag toedien wanneer stygende en dalende lugbewegings plaasvind nie.
- Moenie onder temperatuurinversie-toestande (deur bokant of binne-in die inversielaaq te spuit) toedien nie.
- Moenie spuit indien die windspoed 15 km per uur oorskry nie.

#### Algemeen

- Verseker dat die lande akkuraat gemerk is en dat die spuitoperator presies weet watter lande gespuit moet word.
- Verkry 'n versekering van die spuitoperator dat aan die bogenoemde vereistes voldoen sal word.

### Voor-opkoms toediening:

- 'n Minimum sputtvolume van 40 l/ha.
- 'n Minimum van 20 tot 30 druppels per cm<sup>2</sup> moet op die teikengebied herwin word.
- Gebruik 'n druppelspektrum met 'n VMD van 450 mikron. Verseker dat die produksie van fyn druppels (kleiner as 150 mikron met hoë wegdrywings- en verdampingspotensiaal) tot 'n minimum beperk word.

### Faktore wat onkruidbeheer beïnvloed:

- Die werking van **CYCLONE** en sy mengsels kan beïnvloed word deur 'n aantal faktore wat die groei van plante en dus die onkruiddodende werking van die produk ook sal beïnvloed. Faktore soos grond-pH, grondvog, organiese materiaal en teenwoordigheid van onkruide, kan die nawerking van die onkruiddoder beïnvloed.
- Droë grondtoestande na die **voor-opkoms** toediening kan tot verlaagde beheer van ontkiemende onkruide lei. Dit kan reggestel word deur die oppervlakte meganies te breek of met 'n na-opkoms toediening van **CYCLONE** en sy mengsels by die korrekte onkruidgroeistadium en nadat dit gereën het.
- Aanhoudende reën en bewolkte toestande na 'n na-opkoms toediening mag die effektiwiteit van die produk verlaag.
- In grond met 'n hoë organiese materiaalinhou kan die tydperk van onkruidbeheer korter wees as wat op die tabel aangedui is.

Die verwagte tydperk van onkruidbeheer moet 4 - 8 weke wees, afhangende van verbouingspraktyke, bogenoemde voorwaardes en onkruidspesies teenwoordig.

- Wanneer 'n na-opkoms toediening van **CYCLONE** in die vooruitsig gestel word, vermy die volgende:
  - Strestoestande by onkruide veroorsaak deur droogte, koue weerstoestande, siektes, insekskade, minerale tekorte en versuiping.
  - Toediening op onkruide ouer as die optimum groeistadium. - Toediening op onkruide wat nie aktief groei nie.
- Indien een of meer van hierdie toestande tydens toediening van **CYCLONE** voorkom, kan die onkruiddoderwerking verlaag word.

### MIELIES en SUIKERMIELIES (super soet kultivars uitgesluit):

- Gebruik slegs die aanbevole hoeveelhede van die tenkmengselprodukte soos in die tabelle hieronder uiteengesit.
- Dien **CYCLONE** as 'n vooropkomstoediening toe by aanplanting, of in 'n onkruiddoderprogram, of as 'n vroeë na-opkoms bespuiting op die onkruid en gewas. • Wanneer **CYCLONE** op sy eie toegedien word of wanneer **CYCLONE** saam met **ACETAK EC** as 'n na-opkomsbespuiting gedoen word, word die byvoeging van 'n geskikte benatter aanbeveel (slegs waar onkruide sigbaar teenwoordig is). Die byvoeging van so 'n benatter kan tot tydelike vergeling van mielies lei wanneer dit voor die 4-blaarstadium toegedien word.
- Wanneer **CYCLONE** na-opkoms toegedien word vir moeilike beheerbare onkruide, bv, *Tribulus terrestris*, *Commelina benghalensis* en *Ipomoea purpurea*, is die byvoeging van **TROOPER SL** teen 'n dosis van 350 - 500 ml per hektaar noodsaaklik (Slegs by Mielies en Soetmielies). Verwys na die **TROOPER SL** etiket vir beperkings en gebruiksvoorwaardes.
- Daar is geen bekende kultivarbeperkings vir kommersiële mielies nie. **CYCLONE** kan op die volgende suikermielie-variëteite toegedien word: Commander, Dynasty, Excellency, Jubilee RR, Melody, More, Napier, Rival, Shieldcrest en Sweety 82.
- **PREFIX S EC** toediening tydens plant word aanbeveel indien grasse 'n probleem is, opgevolg met **CYCLONE** plus **ATRAZINE 900WG** as 'n vroeë na-opkoms toediening vir die beheer van breëblaaronkruide. Onkruide wat ouer as die optimum groeistadium is ten tyde van die toediening sal nie beheer word nie. Onder toestande van hoë onkruiddruk en/of swaarder grond, gebruik altyd die hoër toedieningshoeveelheid.

### AANBEVELINGS

**TABEL 1. CYCLONE** in 'n tenkmengsel met **ATRAZINE 900WG** plus **PREFIX S EC** vir breëspektrum voor-opkoms onkruidbeheer as 'n enkele toediening in mielies.

GEWAS	% KLEI	DOSIS (ℓ/ha)		
		PREFIX S EC	ATRAZINE 900WG	CYCLONE
<b>MIELIES</b> Voor-opkoms tenkmengsel	0 – 10	0.5	0.17 – 0.47	0.25 – 0.7
	11 – 15	0.75	0.17 – 0.47	0.25 – 0.7
	16 – 20	0.9	0.33 – 0.5	0.5 – 0.75
	21 – 50	1.0	0.33 – 0.5	0.5 – 0.75

#### Opmerkings

- Wanneer dit voor-opkoms toegedien word, moet **CYCLONE** tydens of onmiddellik na aanplanting op 'n onkruidvrye saadbed toegedien word. Die saadbed moet verkiekslik fyn en egalig wees sonder oormatige gewas-oorskot om die eweredige verspreiding van die **CYCLONE** op die grondoppervlak te verseker.
- Waar minimum- of stoppelbewerking gedoen word, kan onkruid alreeds ten tyde van plant opgekom het. Indien mielies of graansorghum onder sulke omstandighede geplant word, of as hulle geplant is in 'n ou saadbed waar grasse reeds ontkiem het en/of die breëblaaronkruid verby die vier-blaarstadium ontwikkel het, word dit aanbeveel om parakwat by die **CYCLONE** spuitoplossing te voeg teen 'n dosis wat

deur die vervaardiger aanbeveel word. Die parakwat sal die bestaande onkruid vernietig en 'n skoon vooropkomstoestand skep wat sal verseker dat **CYCLONE** effektiief werk.

#### NOTA:

1. Wanneer parakwat bygevoeg word, moet die toediening plaasvind voordat die gewas opkom, anders sal parakwat skade aan die gewas veroorsaak.
2. In die geval van minimum- of stoppelbewerking, kan die hoeveelheid stoppels en organiese materiaal op die oppervlak die doeltreffendheid van die **CYCLONE** verminder. Die verteenwoordiger van die vervaardiger of verspreider behoort geraadpleeg te word.
- **CYCLONE** kan gebruik word as 'n voor-opkoms onkruiddoder in 'n tenkmengsel met **PREFIX S EC** en **ATRAZINE 900WG**.
- **CYCLONE** en **ATRAZINE 900WG** kan gebruik word in 'n program met **PREFIX S EC** waar die **PREFIX S EC** toegedien word tydens aanplanting, gevvolg deur 'n **CYCLONE** plus **ATRAZINE 900WG** voor-opkoms van onkruid.

**TABEL 2. CYCLONE** in 'n tenkmengsel met **ATRAZINE 900 WG** vir breëspektrum naopkoms onkruidbeheer in mielies.

GEWAS	DOSIS (ℓ/ha)	
	ATRAZINE 900WG	CYCLONE
<b>Mielies</b> Na-opkoms tenkmengsel	0.27 – 0.47	0.4 – 0.7

#### Opmerkings

- Die toediening word aanbeveel as 'n opvolg-aanwending op mielies wat reeds met 'n voor-opkoms grasdodermengsel soos **PREFIX S EC** of **ULTRAMOC S EC** behandel is. Versuim om so 'n voor-opkoms behandeling te doen, kan tot abnormale onkruidpopulasiedruk lei met gevvolgleke onkruidkompetisie en swak opvolg resultate met na-opkoms toedienings.
- Die bogenoemde mengsel kan onmiddellik toegedien word nadat 'n meganiese bewerking op 'n voor-opkoms basis gedoen is, in welke geval geen addisionele benatter vereis word nie.
- Vir 'n na-opkoms toediening, moet die mielies ten minste in die 4-blaarstadium wees.
- Indien koue en nat weerstoestande heers of voorkom tydens of kort na toediening van **CYCLONE**, kan chlorose voorkom, maar opbrengs sal nie beïnvloed word nie.
- Breëblaaronkruid moet nie verder as die 4-blaarstadium en grasse nie verder as die 2-3-blaarstadium ontwikkel wees, indien teenwoordig met aanwending nie.
- 'n Geregistreerde benatter met penetreer-eienskappe soos Solitaire, Performer en Penetrex moet by die spuitmengsel bygevoeg word vir alle na-opkoms toedienings waar onkruid alreeds opgekom het.
- Die dosis van die tabel hierbo wat gekies word, is afhanglik van die onkruidspesies wat beheer moet word en die tydperk van beheer wat vereis word.

**NOTA:** **TABEL 1.** en **TABEL 2.** kan gebruik word as 'n program waar die **CYCLONE**, die **ATRAZINE 900WG** en **PREFIX S EC** saam toegedien word vir die voor-opkoms van mielies en onkruid en dan met die **CYCLONE** en **ATRAZINE 900WG** as 'n na-opkoms van die mielies opgevolg word teen die dosis wat in die tabelle hierbo gegee word.

**TABEL 3. CYCLONE** in 'n tenkmengsel met **ATRAZINE 900WG** en **ACETAK EC** vir breëspektrum na-opkoms onkruidbeheer in mielies.

GEWAS	DOSIS (ℓ/ha)		
	ATRAZINE 900WG	CYCLONE	ACETAK EC
<b>Mielies</b> Na-opkoms tenkmengsel	0.27 – 0.47	0.4 – 0.7	0.18 – 0.35

#### Opmerkings

- Die toediening word aanbeveel as 'n opvolg-aanwending op mielies wat reeds met 'n voor-opkoms grasdodermengsel soos **PREFIX S EC** of **ULTRAMOC XTRA EC** behandel is. Versuim om so 'n voor-opkoms behandeling te doen, kan tot abnormale onkruidpopulasiedruk lei met gevollike onkruidkompetisie en swak opvolg resultate met na-opkoms toedienings.
- Die bogenoemde mengsel kan onmiddellik toegedien word nadat 'n meganiese bewerking op 'n voor-opkoms basis gedoen is, in welke geval geen addisionele benatter vereis word nie.
- Vir 'n na-opkoms toediening, moet die mielies ten minste in die 4-blaarstadium wees.
- Indien koue en nat weerstoestande heers of voorkom tydens of kort na toediening van **CYCLONE**, kan chlorose voorkom, maar opbrengs sal nie beïnvloed word nie.
- Breëblaaronkruide moet nie verder as die 4-blaarstadium en grasse nie verder as die 2-3-blaarstadium ontwikkel wees, indien teenwoordig met aanwending nie.
- 'n Geregistreerde benatter met penetreer-eienskappe soos Solitaire, Performer en Penetrex moet by die spuitmengsel bygevoeg word vir alle na-opkoms toedienings waar onkruid alreeds opgekom het.
- Die dosis van die tabel hierbo wat gekies word, is afhanglik van die onkruidspesies wat beheer moet word en die tydperk van beheer wat vereis word.

**TABEL 4. CYCLONE** in 'n tenkmengsel met **TROOPER SL** vir die breëspektrum na-opkoms onkruidbeheer in mielies.

GEWAS	DOSIS (ℓ/ha)		
	TROOPER SL	CYCLONE	ATRAZINE 900WG
<b>Mielies</b> Na-opkoms tenkmengsel	0.35 – 0.5	0.4 – 0.7	0.27 – 0.47

#### Opmerkings

- Die aanwending word aanbeveel as 'n opvolg-aanwending op mielies wat reeds met 'n voor-opkoms grasdodermengsel soos **PREFIX S EC** of **ULTRAMOC XTRA EC** behandel is. Versuim om so 'n voor-opkoms behandeling te doen, kan tot abnormale onkruidpopulasiedruk lei met gevollike onkruidkompetisie en swak opvolg resultate met na-opkoms toedienings.
- Die bogenoemde mengsel kan onmiddellik toegedien word nadat 'n meganiese bewerking op 'n voor-opkoms basis gedoen is, in welke geval geen addisionele benatter vereis word nie.
- Vir 'n na-opkoms toediening, moet die mielies ten minste in die 4-blaarstadium wees.
- Indien koue en nat weerstoestande heers of voorkom tydens of kort na toediening van **CYCLONE**, kan chlorose voorkom, maar opbrengs sal nie beïnvloed word nie.
- Breëblaaronkruide moet nie verder as die 4-blaarstadium en grasse nie verder as die 2-3-blaarstadium ontwikkel wees, indien teenwoordig met aanwending nie.
- 'n Geregistreerde benatter met penetreer-eienskappe soos Solitaire, Performer en Penetrex moet by die spuitmengsel bygevoeg word vir alle na-opkoms toedienings waar onkruid alreeds opgekom het.

- Die dosis van die tabel hierbo wat gekies word, is afhanglik van die onkruidspesies wat beheer moet word en die tydperk van beheer wat vereis word.

Raadpleeg die **TROOPER SL** etiket vir die lys van onkruide wat beheer kan verwag word.

**ONKRUIDE WAT BEHEER SAL WORD DEUR CYCLONE plus ATRAZINE 900 WG plus PREFIX S EC (Tabel 1):**

Meerjarige misbredie	<i>Amaranthus deflexus</i>
Gewone misbredie	<i>Amaranthus hybridus</i>
Withondebossie	<i>Chenopodium album</i>
Witpluimchloris	<i>Chloris virgata</i>
Rusperbossie	<i>Cleome monophylla</i>
Kosmos	<i>Cosmos bipinnatus</i>
Mielie-Crotalaria (Wilde Lusern)	<i>Crotalaria sphaerocarpa</i>
Grootstinkblaar	<i>Datura ferox</i>
Kruisvingergras	<i>Digitaria sanguinalis</i>
Jongosgras	<i>Eleusine indica</i>
Gisekia	<i>Gisekia pharnaceoides</i>
Gewone peperbossie	<i>Lepidium africanum</i>
Basterappelliefie	<i>Nicandra physaloides</i>
Porslein	<i>Portulaca oleracea</i>
-	<i>Spermacoce sinensis</i>
Kakiebos	<i>Tagetes minuta</i>
Grootwortelsaadgras	<i>Tragus racemosus</i>

**Waar die hoër dosis gebruik word, sal die volgende onkruide waarskynlik addisioneel beheer word:**

Repopsterklits	<i>Acanthospermum hispidum</i>
Doringmisbredie	<i>Amaranthus spinosus</i>
Gewone knapsekêrel	<i>Bidens pilosa</i>
Litjiesinjaalgras	<i>Brachiaria eruciformis</i>
Cassia	<i>Cassia spp</i>
Groen hondebossie	<i>Chenopodium carinatum</i>
Kaapse dubbeltjie	<i>Emex australis</i>
Wildestokroos	<i>Hibiscus cannabinus</i>
Terblansbossie	<i>Hibiscus trionum</i>
Italiaanse raaigras	<i>Lolium multiflorum</i>
Lusern	<i>Medicago sativa</i>
Soetbuffelsgras	<i>Panicum schinzii</i>
Wilde appelliefie	<i>Physalis angulata</i>
Ramenas	<i>Raphanus raphanistrum</i>
Tropiese Richardia	<i>Richardia brasiliensis</i>
Kleinkakiebos	<i>Schkuhria pinnata</i>
Rooiborselgras	<i>Setaria pallide-fusca</i>
Hartblaartaaiman	<i>Sida cordifolia</i>
Nastergal	<i>Solanum nigrum</i>
Dubbeltjie	<i>Tribulus terrestris</i>
Beesgras	<i>Urochloa panicoides</i>

**ONKRUIDE WAT BEHEER SAL WORD DEUR CYCLONE plus ATRAZINE 900 WG plus PREFIX S EC (Tabel 2):**

Meerjarige misbredie	<i>Amaranthus deflexus</i>
Gewone misbredie	<i>Amaranthus hybridus</i>
Withondebossie	<i>Chenopodium album</i>
Witpluimchloris	<i>Chloris virgata</i>
Bengaalse wandelende Jood	<i>Commelina benghalensis</i>
Grootstinkblaar	<i>Datura ferox</i>
Stinkblaar	<i>Datura stramonium</i>
Kruisvingergras	<i>Digitaria sanguinalis</i>
Terblansbossie	<i>Hibiscus trionum</i>
Basterappelliefie	<i>Nicandra physaloides</i>
Kleinkakiebos	<i>Schkuhria pinnata</i>
-	<i>Spermacoce senensis</i>
Kakiebos	<i>Tagetes minuta</i>

Die volgende onkruide kan beheer word bykomend tot die bogenoemde wanneer ACETAK EC teen die aanbevole dosis bygevoeg word :

Doringmisbredie	<i>Amaranthus spinosus</i>
Kosmos	<i>Cosmos bipinnatus</i>
Jongosgras	<i>Eleusine indica</i>
Knopkruid	<i>Galinsoga parviflora</i>
Soetbuffelsgras	<i>Panicum schinzii</i>
Porslein	<i>Portulaca oleracea</i>
Klitssetaria	<i>Setaria verticillata</i>
Dubbeltjie	<i>Tribulus terrestris</i>
Beesgras	<i>Urochloa panicoides</i>

#### NOTAS:

Die wisselvallige beheer van onkruide soos hierbo genoem sal afhang van omgewingstoestande en die toedieningsdosis. Die vooropkomsbeheer van *Cyperus esculentus* sal van die volgende afhang:

- Waar 'n dosis keuse gegee word moet die hoér dosis gebruik word.
- Aanplanting in 'n ferm of fyn saadbed moet voorafgegaan word deur 'n diep ploeg.
- **ULTRAMOC XTRA EC of PREFIX S EC** moet toegedien word binne 2 dae na die plantproses.
- Genoeg aanhoudende reën of besproeiing (ten minste 15 mm op ligte grond en 25 mm op swaar grond) moet binne 7 dae van bespuiting val, sodat die onkruiddoder tot in die ontkiemingsgebied geloog kan word.

Die registrasiehouer neem geen verantwoordelikheid vir beheer van onkruide wat nie gelys is nie.