

ULTRAMOC S EC

BEFORE USING THIS PRODUCT, READ THE LABEL CAREFULLY

GERBUKSAANWYSINGS INGESLUIT
Lidnommer
Datum van vervaardiging

VERWYS NA BESONDERHEDE
SOOS OP HOUER / SAK GEDRUK

ULTRAMOC S EC

HERBICIDE



Reg. No. L7342, Act/Wet No. 36 of/van 1947
N-AR 1636

1: 12/09/2003

An emulsifiable concentrate herbicide for the pre-emergence control of most annual grasses and certain broadleaf weeds in maize.

'n Emulgeerbare konsentraat onkruid-doder vir die voor-opkoms beheer van eenjarige grasse en sekere breëblaar-onkruide in mielies.

HRAC HERBICIDE GROUP CODE	K3	HRAC ONKRUIDDODERGROEPKODE
ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL		
Metolachlor (chloroacetanilide)	800 g/l	Metolachloor (chloorasetanilied)

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

20L

UN Number: 3082



HARMFUL / SKADELIK












WARNINGS

- Handle with care.
- Poisonous if swallowed.
- May cause eye and skin irritation as well as skin sensitisation.
- Can be toxic to fish.
- Store under lock and key in a cool place.
- **FLAMMABLE** – Do not store or open container near open flame.
- Store away from food, feed, fertilizer and other agricultural products.
- Keep out of reach of children, uninformed persons and animals.
- In case of poisoning call a doctor and show him this label.
- **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.

SYMPTOMS OF HUMAN POISONING

Irritation effects on skin and mucous membranes are the common reactions. May cause eye irritation. May cause skin irritation and allergic reaction. May cause skin sensitisation. If large quantities are ingested, nausea, vomiting abdominal distress and diarrhoea may occur.

FIRST AID TREATMENT

Skin contact: Remove contaminated clothing as well as shoes and leather goods. Wash body with non-abrasive soap and lots of water. Persons providing first aid must wear gloves to avoid self-contamination. Seek medical advice if necessary.

Eye contact: Flush eyes immediately with large amounts of clean water for approximately 15 minutes.

Occasionally lift the upper and lower lids. If eye irritation persists, get medical attention.

Inhalation: Remove patient to a well ventilated area and loosen clothing around the neck. Perform artificial respiration and administer oxygen if necessary. Keep patient warm and calm. **Seek medical advice immediately.**

Ingestion: Do not induce vomiting. Get medical attention immediately. Administration of gastric lavage or oxygen should be performed by qualified medical personnel.

NOTE TO PHYSICIAN

No specific antidote. Treat symptomatically and supportively. Keep patient under observation. Perform gastric lavage and catharsis if the victim is not unconscious. If less than 10 mg per kg body weight was ingested, administer 30 – 60 g activated charcoal in 150 – 300 ml water.

USE RESTRICTIONS

- Do not use **Utramoc S EC** on experimental or newly released cultivars/varieties without first consulting your supplier or the seed company concerned.
- Do not use **Utramoc S EC** 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 **Utramoc S EC** to any crop or situation not mentioned in this instruction leaflet.
- Only apply **Utramoc S EC** 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. **Utramoc S EC** will also give weed control in stubble mulch or minimum tillage situations.
- If **Utramoc S EC** 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.

DIRECTIONS FOR USE

Use only as directed.

MIXING INSTRUCTIONS

Half-fill the spray tank with suitable water, then add the required amount of **Utramoc S EC** 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 **Utramoc S EC** 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. **Utramoc S EC** is compatible with most pyrethroid insecticides, Ammo SC, Atra Super 600 SC and atrazine 500 SC.

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 30 – 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 **Ultramoc S EC** 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:

Ultramoc S EC 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 30 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 aurally 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 30 l/ha.
- A minimum of 20 to 30 droplets per cm² 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.

RECOMMENDATIONS

TABLE 1. Ultramoc S EC in tank mixture with atrazine SC or Atra Super 600 SC for broad spectrum pre-emergence weed control as a single application in maize.

CROP	% CLAY	Ultramoc S EC (ℓ/ha)	Atrazine SC (ℓ/ha)	Atra Super 600 SC (ℓ/ha)	TIMING OF APPLICATION
Maize	11 – 20	1.2 – 1.6	2.0 – 2.5	1.7 – 2.1	Apply to a well prepared seedbed after planting but before crop and weed emergence.
	21 – 30	1.6 – 1.75	2.5 – 3.0	2.1 – 2.5	Use the higher rate for extended and improved control of broadleaf weeds, crab finger grass and yellow nutsedge.
	31 – 40	1.75 – 1.9	3.0 – 4.0	2.5 – 3.33	Use the higher rate on soils with > 1.0 % organic matter content.
	41 – 50	1.9 – 2.3	4.0 – 5.0	3.33 – 4.2	

TABLE 2. Ultramoc S EC applied pre-emergence followed by early post-emergence application of Ammo SC or Atra Super 600 SC plus Trooper SL or 2,4-D amine for broadleaf weed control.

CROP	% CLAY	Ultramoc S EC (ℓ/ha)	FOLLOWED BY	Ammo SC (ℓ/ha)	Atra Super 600 SC (ℓ/ha)	TIMING OF APPLICATION
Maize	11 – 20	1.2 – 1.6	FOLLOWED BY	1.9 – 2.3	1.7 – 2.1	Apply to a well prepared seedbed after planting but before crop and weed emergence.
	21 – 30	1.6 – 1.75		2.3 – 2.8	2.1 – 2.5	Use the higher rate for extended and improved control of broadleaf weeds, crab finger grass and yellow nutsedge.
	31 – 40	1.75 – 1.9		2.8 – 3.7	2.5 – 3.33	Use the higher rate on soils with > 1.0 % organic matter content.
	41 – 50	1.9 – 2.3		3.7 – 4.6	3.33 – 4.2	

Remarks

- The follow-up application in TABLE 2. above may or may not require the addition of 2,4-D amine or **Trooper SL** at their respective recommended dosage rates to assist in controlling emerged broadleaf weeds.

TABLE 3. Ultramoc S EC applied pre-emergence followed by early post-emergence application of Ammo SC or Atra Super 600 SC plus Trooper SL or 2,4-D amine for broadleaf weed control to facilitate crop rotation.

CROP	% CLAY	Ultramoc S EC (ℓ/ha)	FOLLOWED BY	Ammo SC (ℓ/ha)	Atra Super 600 SC (ℓ/ha)	TIMING OF APPLICATION
Maize	11 – 20	1.2 – 1.6	FOLLOWED BY	All soil types 1.8	All soil types	Apply to a well prepared seedbed after planting but before crop and weed emergence.
	21 – 30	1.6 – 1.75		PLUS 0.3 – 0.5	1.7 PLUS 0.3 – 0.5	Use the higher rate for extended and improved control of grass weeds and yellow nutsedge.
	31 – 40	1.75 – 1.9		Trooper SL OR 0.75 2,4-D amine	Trooper SL OR 0.75 2,4-D amine	Use the higher rate on soils with > 1.0 % organic matter content.
	41 – 50	1.9 – 2.3				

TABLE 4. Ultramoc S EC (tank mixture pre-emergence – initial/short term control)

CROP	% CLAY	Ultramoc S EC (ℓ/ha)	Atrazine SC (ℓ/ha)	Atra Super 600 SC (ℓ/ha)	TIMING OF APPLICATION
Maize	0 – 10	0.6 – 0.8	0.9 – 1.0	0.75 – 0.85	Apply to a well prepared seedbed after planting but before crop and weed emergence.
	11 – 20	0.8 – 1.0	1.0 – 1.2	0.85 – 1.0	Use the higher rate where the clay % is higher.
	21 – 30	1.0 – 1.4	1.2 – 1.4	1.0 – 1.2	Use the higher rate on soils with > 1.0 % organic matter content.
	> 31	1.4 – 1.6	1.4 – 1.9	1.2 – 1.7	

TABLE 5. Unimoc EC applied as a follow-up tank mixture to extend pre-emergence weed control after initial application as above in TABLE 4.

CROP	% CLAY	Unimoc EC (ℓ/ha)	Ammo SC (ℓ/ha)	Atra Super 600 SC (ℓ/ha)	TIMING OF APPLICATION
Maize	0 – 10	0.4 – 0.5	1.0 – 1.3	0.9 – 1.2	Apply prior to weed emergence. Use the higher rate where the clay % is higher or where extended control is required. Use the higher rate on soils with > 1.0 % organic matter content.
	11 – 20	0.5 – 0.6	1.3 – 1.6	1.2 – 1.5	
	21 – 30	0.6 – 0.8	1.6 – 2.3	1.5 – 2.1	
	> 31	0.8 – 1.0	2.3 – 2.8	2.1 – 2.5	

TABLE 6. Ultramoc S EC (for use in the North-western Free State and North West Province)

CROP	% CLAY	Ultramoc S EC (ℓ/ha)	Atra Super 600 SC (ℓ/ha)	TIMING OF APPLICATION
Maize	0 – 10	0.6	1.8	Apply at, or immediately after, planting to a freshly prepared seedbed.
	11 – 20	0.75	2.0	
	21 – 30	1.0	2.5	

Remarks

- ☐ To avoid carry-over problems, the Atra Super 600 SC rate should not exceed 1.7 ℓ/ha on soils with more than 10% clay and 1,25 ℓ/ha on soils with less than 10% clay.

General remarks (referring to TABLE 1. – 6.)

- Application according to TABLE 4. will provide initial control only. A follow-up application will be necessary according to TABLE 5. as soon as weed germination commences (2 – 3 weeks after crop emergence).
- Where nutsedge or high weed pressures are a problem as well as under heavier soil conditions, always select the higher rate of application where applicable.
- Follow-up applications can be carried out with or without mechanical cultivation. Where weeds are to be controlled by spraying only, the weeds must not be allowed to develop beyond a growth stage where they will not be controlled by the spray application alone.
- Where follow-up applications are made without mechanical cultivation:
For application of Ammo SC - broadleaved weeds may not be larger than the 4-leaf stage and grasses should not yet have emerged.
For Ammo SC plus 2,4-D amine or **Trooper SL** broadleaved weeds may not be larger than the 4-leaf stage and grasses should not yet have emerged.
- Adhere to the use restrictions as indicated on the labels of the products containing triazines for follow-up crops. To facilitate crop rotation, atrazine SC should not exceed 2.0 ℓ/ha, Atra Super 600 SC should not exceed 1,7 ℓ/ha and Ammo SC should not exceed 1,85 ℓ/ha per growing season.
- Where crop rotation with triazine sensitive crops is practiced, the rates in above tables should be reduced to levels where the total rate of triazines per growing season does not exceed 1.0 kg/ha. • Where atrazine SC or Atra Super 600 SC is applied post-emergence to control broadleaf weeds, Solitaire must be added to the mixture at its recommended dosage rate. Where Ammo SC is used, no additional surfactant is required.

WEEDS CONTROLLED BY Ultramoc S EC:

Grass species (pre-emergence only)

<i>Brachiaria eruciformis</i>	Sweet signal grass
<i>Chloris virgata</i>	Feathertop Chloris
<i>Dactyloctenium aegyptium</i>	Crowfoot
<i>Digitaria sanguinalis</i>	Crab finger-grass

Echinochloa crusgalli
Eleusine indica
Panicum maximum
Panicum schinzii
Pseudobrachiaria deflexa
Setaria pallide-fusca
Setaria verticillata
Tragus berteronianus
Tragus racemosus
Urochloa mozambicensis
Urochloa panicoides

Banyard grass
Goose grass
Common buffalo grass
Sweet buffalo grass
False signal grass
Red bristle grass
Sticky bristle grass
Small carrotseed grass
Large carrotseed grass
Bushveld herringbone grass
Herringbone grass

Variable control (pre-emergence)

Amaranthus hybridus
Amaranthus spinosus
Amaranthus thunbergii
Chenopodium carinatum
Cleome monophylla
Commelina benghalensis
Cyperus esculentus
Datura ferox
Datura stramonium
Galinsoga parviflora
Nicandra physaloides
Portulaca oleracea

Cape pigweed
Thorny pigweed
Red pigweed
Green goosefoot
Spindlepod
Bengal wandering Jew
Yellow nutsedge
Large thorn apple
Common thorn apple
Gallant soldier
Apple of Peru
Purslane

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 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.
- Nutsedge will not be controlled at the reduced rates recommended in TABLE 4.

To increase the spectrum of broadleaf weeds controlled, it is recommended that either tank mixes or follow-up application of standard registered broadleaf herbicides are used in accordance with the manufacturer's label recommendations.

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

ACKNOWLEDGEMENT OF TRADEMARKS

Atra Super 600 SC (L. 6500)
Solitaire (L. 6962)
Atra Super 600 SC (L. 6500)

Icon Chemicals (Pty) Ltd
Safagric
Icon Chemicals (Pty) Ltd

WAARSKUWINGS

- Hanteer versigtig.
- Giftig indien ingesluk.
- Mag oog en vel irritasie veroorsaak sowel as vel sensitisering.
- Kan gevaarlik wees vir visse.
- Berg agter slot en grendel in 'n koel plek.
- **VLAMBAAR** – berg en maak houer oop weg van oop vlam.
- Berg weg van voedsel, voer, kunsmis en ander landbou produkte.
- Hou buite bereik van kinders, oningeligte persone en diere.
- In geval van vergiftiging ontbied 'n geneesheer en toon hierdie etiket aan hom.
- **Lugtoediening:** Stel al die inwoners in die onmiddellike omgewing van die gebied wat gespuit gaan word en reik nodige waarskuwings uit. Moet nie oor wateroppervlaktes spuit nie en tref voorsorg dat die spuitnewel nie water of 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 die 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 tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordlikheid vir skade aan gewasse, plantegroei en die omgewing of nadelige invloede op mens of dier of vir 'n gebrek aan prestasie van die betrokke middel as gevolg van versuim van die gebruiker om etiketaanwysings na te kom, of as gevolg van die ontstaan van toestande wat nie kragtens die registrasie voorsien kon word nie. Raadpleeg die verskaffer in die geval van enige onsekerheid.

VOORSORGMATREËLS

- Moet nie spuitnewel inasem nie.
- Vermyn kontak met die vel en oë deur beskermende klere te dra wanneer die produk gemeng word.
- Indien produk in aanraking met die oë kom, spoel met water en kry mediese aandag indien nodig.
- Was met seep en water na gebruik en toevallige vel kontak asook besoedelde klere.
- Moet nie eet, drink of rook tydens vermenging of toediening van die produk of voordat die hande en gesig gewas is nie.
- Vermyn wegdrywing van spuitnewel op ander gewasse, weiveld, riviere, damme en plekke wat nie behandel moet word nie.
- Maak toedieningsapparaat skoon na gebruik. Uitspoelwater moet nie gewasse, weiveld, riviere, damme en boorgate besoedel nie.
- Voorkom die besoedeling van voedsel, voer, drinkwater en eetgerei.
- Keer die leë houer om oor die spuit- of mengtenk en dreineer vir minstens 30 sekondes nadat die vloeitot 'n gedrup verminder het. Spoel die leë houer daarna drie keer uit met 'n volume skoon water gelykstande aan 'n minimum van 10% van die houer. Gooi die spoelwater by die inhoud van die spuittenk voordat die houer vernietig word.
- Vernietig die leë houer en moet dit vir geen ander doel gebruik nie.

SIMPTOME VAN MENSLIKE VERGIFTING

Irritasie van vel en slymvlies is tipiese reaksies. Mag irritasie van die oë veroorsaak. Dit mag ook irritasie van die vel en 'n allergiese reaksie veroorsaak. Mag vel sensitiwiteit veroorsaak. As groot hoeveelhede mondelyks ingeneem word, kan naarheid, braking, abdominale teerheid en diaree veroorsaak word.

NOODHULP BEHANDELING

Velkontak: Verwyder besoedelde klere, sowel as skoene en leer goedere. Was die hele lyf met 'n sagte seep en baie water. Moenie 'n skuurmiddel gebruik nie. Persone wat noodhulp toedien, moet handskoene dra om selfkontaminasie te voorkom. Soek mediese advies indien benodig.

Oogkontak: Was oë onmiddellik uit met groot hoeveede skoon water, vir ongeveer 15 minute. Lig die onderste en boonste ooglede gedurig. Indien oog irritasie aanhou, soek mediese hulp.

Inaseming: Verwyder die persoon van die bron van vergiftiging na 'n goed geventileerde area en maak klere om die nek los. Pas kunsmatige asemhaling toe en dien suurstof toe indien nodig. Hou pasient warm en gerus. **Ontbied onmiddellik mediese hulp.**

Mondelike inname: Moenie braking induseer nie. Ontbied onmiddellik mediese hulp.

Toediening van gastriese reiniging of suurstof moet deur opgeleide mediese personeel toegedien word.

NOTA AAN GENEESHEER

Geen spesifieke teengif. Behandel simptome en ondersteunend. Hou pasient onder observasie. Dien gastriese reiniging en suiwering toe indien die pasient nie bewusteloos is nie. As minder as 10 mg per kg liggaamsgewig ingeneem is, dien 30 – 60 g geaktiveerde houtskool toe in 150 – 300 ml water.

GEBRUIKSBEPERKINGS

- Moet nie **Ultramoc S EC** op eksperimentele of nuut vrygestelde kultivars gebruik alvorens die vervaardigers of saadverspreiders geraadpleeg is nie.
- Moet nie **Ultramoc S EC** op swak gedreineerde grond of grond met 'n kompaksie laag toedien nie. Die onkruidoder mag tydens versuip toestande skade aan gewase veroorsaak.
- Moet nie **Ultramoc S EC** toedien op enige gewas of situasie wat nie op hierdie etiket verskyn nie.
- Dien **Ultramoc S EC** toe slegs met 'n akkurate en veilige toedieningsmetode.
- Swaar reën op sandgronde met 'n lae organiese materiaal inhoud sowel as vloedbesproeiing mag lei tot verminderde onkruidbeheer.
- Optimale onkruidbeheer word verkry op 'n fyn, gelyk saadbed wat vry van kluite, onkruid en plantreste is. **Ultramoc S EC** sal ook onkruidbeheer waar verminderde of deklaagbewerking toegepas word.
- As **Ultramoc S EC** met ander middels in tenkmengsels gebruik word, moet die gebruiksaanwysings van die betrokke produk gevolg word.
- Gebruik die laer dosisse op gronde in die Noordwes Provinsie, Noord-Wes Vrystaat.
- Gebruik die laer dosisse op ligter gronde en waar die onkruidpopulasie druk nie so hoog is nie.

GEBRUIKSAANWYSINGS

Gebruik slegs soos aangedui

MENGINSTRUKSIES

Maak die spuitenk halfvol met geskikte water en voeg die benodigde hoeveelheid **Ultramoc S EC** by terwyl water aanhoudend geroer word. Maak die spuitenk tot die finale volume vol. Roer goed, om vermenging te verseker, voordat die mengsel toegedien word. As tenkmengsels gemaak word met ander middels, moet die betrokke vervaardiger se etiket gevolg word. **Die tenkmengsel moet onmiddellik uitgespuit word en nie toegelaat word om oornag in die spuitenk te staan nie.** Die spuittoerusting moet aan die einde van toediening deeglik uitgewas word.

VERENIGBAARHEID

Die verenigbaarheid van **Ultramoc S EC** met ander produkte hang af van die formulasie van die betrokke produkte asook die kwaliteit van die spuitwater. As gevolg van die veranderinge in formulasies, word dit aanbeveel dat 'n fisiese verenigbaarheidstoets uitgevoer word voor die tenkmengsel gemaak word. **Ultramoc S EC** is verenigbaar met die meeste piretroidede, Ammo SC, Atra Super 600 SC en atrasien SC.

TOEDIENINGSMETODES

Maak seker dat die spuittoerusting reg gekalibreer is en dit moet gedurende die toediening nagegaan word om seker te maak dat die toediening egalig en akkuraat is. Rugsakspuite of 'n konvensionele trekker-gemonteerdebalkspuit kan gebruik word. 'n Totale spuitvolume van 200 – 300 l/ha moet gebruik word en kan toegedien word met platwaaierspuitpunte, verkieslik die lae dryf tipe om 'n fyn druppels te voorkom. **Die mengsel moet aanhoudend en deeglik geroer word tydens toediening.** Gebruik net skoon water vir toediening.

Reënval kort na toediening is noodsaaklik om die onkruidoder in die bogrondlae in te loog waar die ontkiemende onkruid voorkom en daarvoor is 10 – 15 mm reën nodig binne 7 dae na toediening, om optimale resultate te verseker. Onder droë toestande mag onkruidsaailinge opkom. Dié onkruid kan vernietig word deur 'n vlak bewerking wat terselfdertyd die onkruidoder 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 as onbehandelde grond na die oppervlak gebring word. Sorg dat voldoende kunsmis met plant naby die saad geplaas word om kragtige saailinggroei te bevorder. **Ultramoc S EC** moet verkieslik met of net na plant toegedien word, maar nie later as drie dae na plant nie. Gebruik altyd die laer dosis op ligte gronde en waar onkruiddruk laag is.

Grondtoediening:

Ultramoc S EC mag toegedien word met enige behoorlike gekalibreerde medium tot hoëvolume spuit wat toegerus is met 'n goeie roermeganisme wat egalige bedekking sal verseker. 'n Totale spuitvolume van 200 – 300 l/ha moet begruik word en kan toegedien word met platwaaierspuitpunte, verkieslik die lae dryf tipe om fyn druppels te voorkom.

LUGTOEDIENING

Lugtoediening mag slegs deur 'n geregistreerde lugbespuitingsoperateur met 'n geregistreerde en korrek gekalibreerde vliegtuig volgens die instruksies van SABS Kode 0118 (Aerial Application of Agricultural Remedies) 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. Die volgende kriteria moet nagekom word;

Toerusting

- Gebruik geskikte atomiseringsapparaat (hidroliese of roterende spuitkoppe) wat die vereiste druppelgrootte en bedekking van die teiken sal produseer, maar wat die minste verlies van produk deur wegdrywing sal verseker. □ Die operateur 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 in die vlerkvorteks in te beperk.

Toedieningsvereistes

- 'n Minimum volume van 30 l spuitmengsel per ha word aanbeveel. Aangesien hierdie produk nie teen 'n verlaagde spuitvolume getoets is nie, kan die registrasiehouer nie effektiwiteit waarborg of verantwoordelik gehou word vir enige nadelige effek indien hierdie produk teen 'n laer volume as hierbo aanbeveel, uit die lug toegedien word nie.
- 'n Druppelbedekking van 30 - 40 druppels per vk 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 bo die teiken gehandhaaf word.
- Moet nie spuit wanneer die vliegtuig aan die bopunt van 'n draai is of tydens 'n duik of terwyl dit uitklim of draai nie.
- Dien toe voordat die gewas te ruig word aangesien die druppelbedekking op die plante sal verminder word.

Meteorologiese Toestande

- Die verskil tussen die nat- en droëbollesing, soos met 'n swaaihygrometer bepaal, moet nie 8 °C oorskry nie.
- Moenie toedien tydens turbulente en onstabiele weerstoestande of gedeurende die hitte van die dag wanneer stygende en dalende luginbewegings plaasvind nie.
- Moenie toedien onder temperatuur inversie toestande (deur bo of binne die inversie laag te spuit) nie.
- Moenie spuit indien die windspoed 15 km per uur oorskry nie.

Algemeen

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

Voor-opkoms lugtoediening:

- 'n Minimum spuitvolume van 30 ℓ/ha.
- 'n Minimum van 20 tot 30 druppels per cm² 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 verdigtingspotensiaal) tot 'n minimum beperk word.

AANBEVELINGS

TABEL 1. Ultramoc S EC toegedien in 'n tenkmengsel met atrasiën SC of Atra Super 600 SC vir voor-opkoms beheer van grasse en breëblaaronkruid in mielies.

GEWAS	% KLEI	Ultramoc S EC (ℓ/ha)	atrasien SC (ℓ/ha)	Atra Super 600 SC (ℓ/ha)	TOEDIENING
Mielies	11 – 20	1.2 – 1.6	2.0 – 2.5	1.7 – 2.1	Dien toe op 'n goed voorbereide saadbed na plant maar voor opkom van gewas en onkruid. Gebruik die hoër dosis vir verlengde en verbeterde beheer van breëblaar onkruid, kruisvingergras en uintjies. Gebruik die hoër dosis op gronde met > 1.0 % organise materiaal inhoud.
	21 – 30	1.6 – 1.75	2.5 – 3.0	2.1 – 2.5	
	31 – 40	1.75 – 1.9	3.0 – 4.0	2.5 – 3.33	
	41 – 50	1.9 – 2.3	4.0 – 5.0	3.33 – 4.2	

TABEL 2. Ultramoc S EC voor-opkoms toegedien, gevolg deur 'n vroë na-opkoms toediening van Ammo SC of Atra Super 600 SC plus Trooper SL of 2,4-D amien vir breëblaar onkruidbeheer in mielies.

GEWAS	% KLEI	Ultramoc S EC (ℓ/ha)	G E V O L G D E U R	atrasien SC (ℓ/ha)	Atra Super 600 SC (ℓ/ha)	TOEDIENING
Mielies	11 – 20	1.2 – 1.6		1.9 – 2.3	1.7 – 2.1	Dien toe op 'n goed voorbereide saadbed na plant maar voor opkom van gewas en onkruid. Gebruik die hoër dosis vir verlengde en verbeterde beheer van breëblaar onkruid, kruisvingergras en uintjies. Gebruik die hoër dosis op gronde met > 1.0 % organiese materiaal inhoud.
	21 – 30	1.6 – 1.75		2.3 – 2.8	2.1 – 2.5	
	31 – 40	1.75 – 1.9		2.8 – 3.7	2.5 – 3.33	
	41 – 50	1.9 – 2.3		3.7 – 4.6	3.33 – 4.2	

Opmerkings

- Die opvolgtoediening in TABEL 2. bo, mag of mag nie 2,4-D amien of Trooper SL teen hul aanbevole dosisse benodig, om breëblaar onkruid te beheer.

TABEL 3. Ultramoc S EC voor-opkoms toegedien, gevolg deur 'n vroë na-opkoms toediening van Ammo SC of Atra Super 600 SC plus Trooper SL of 2,4-D amien vir breëblaar onkruidbeheer om wisselbou toe te laat.

GEWAS	% KLEI	Ultramoc S EC (ℓ/ha)	G E V O L G D E U R	Ammo SC (ℓ/ha)	Atra Super 600 SC (ℓ/ha)	TOEDIENING
Mielies	11 – 20	1.2 – 1.6		Alle grondtipes 1.8 PLUS 0.3 – 0.5 Trooper SL of 0.75 2,4-D amien	Alle grondtipes 1.7 PLUS 0.3 – 0.5 Trooper SL of 0.75 2,4-D amien	Dien toe op 'n goed voorbereide saadbed na plant maar voor opkom van gewas en onkruid. Gebruik die hoër dosis vir verlengde en verbeterde beheer van breëblaar onkruid, kruisvingergras en uintjies. Gebruik die hoër dosis op gronde met > 1.0 % organise materiaal inhoud.
	21 – 30	1.6 – 1.75				
	31 – 40	1.75 – 1.9				
	41 – 50	1.9 – 2.3				

TABEL 4. Ultramoc S EC in 'n voor-opkoms tenkmengsel vir aanvanklike beheer van grasse en breëblaaronkruid in mielies.

GEWAS	% KLEI	Ultramoc S EC (ℓ/ha)	Atrazine SC (ℓ/ha)	Atra Super 600 SC (ℓ/ha)	TOEDIENING
Mielies	0 – 10	0.6 – 0.8	0.9 – 1.0	0.75 – 0.85	Dien toe op 'n goed voorbereide saadbed na plant maar voor opkom van gewas en onkruid. Gebruik die hoër dosis waar die klei % hoër is. Gebruik die hoër dosis op gronde met > 1.0 % organise material inhoud.
	11 – 20	0.8 – 1.0	1.0 – 1.2	0.85 – 1.0	
	21 – 30	1.0 – 1.4	1.2 – 1.4	1.0 – 1.2	
	> 31	1.4 – 1.6	1.4 – 1.9	1.2 – 1.7	

TABEL 5. Unimoc EC as 'n opvolg tenkmengsel na TABEL 4. om voor-opkoms beheer in mielies te verleng.

GEWAS	% KLEI	Unimoc EC (ℓ/ha)	Ammo SC (ℓ/ha)	Atra Super 600 SC (ℓ/ha)	TOEDIENING
Mielies	0 – 10	0.4 – 0.5	1.0 – 1.3	0.9 – 1.2	Dien to voordat onkruid begin opkom het. Gebruik die hoër dosis waar die klei % hoër is of waar verlengde beheer nodig is. Gebruik die hoër dosis op gronde met > 1.0 % organise material inhoud.
	11 – 20	0.5 – 0.6	1.3 – 1.6	1.2 – 1.5	
	21 – 30	0.6 – 0.8	1.6 – 2.3	1.5 – 2.1	
	> 31	0.8 – 1.0	2.3 – 2.8	2.1 – 2.5	

TABEL 6. Ultramoc S EC (vir gebruik in die Noord-wes Vrystaat en Noord-Wes Provinsie)

GEWAS	% KLEI	Ultramoc S EC (ℓ/ha)	Atra Super 600 SC (ℓ/ha)	TOEDIENING
Mielies	0 – 10	0.6	1.8	Dien toe tydens of onmiddellik na plant op 'n vars voorbereide saadbed.
	11 – 20	0.75	2.0	
	21 – 30	1.0	2.5	

Opmerkings

Om oordragprobleme te vermy, moet nie meer as 1,7 ℓ/ha Atra Super SC gebruik word op gronde met meer as 10% klei en 1,25 ℓ/ha op gronde met minder as 10% klei nie.

Algemene opmerkings (verwys na TABEL 1. – 6.)

- Toediening volgens TABEL 4. sal slegs aanvanklike onkruidbeheer verskaf. Daar moet dus opgevolg word volgens TABEL 5. sodra onkruid begin ontkiem (2 – 3 weke na opkom van die mielies).
- Gebruik altyd die hoër dosis in geval van swaar gronde, hoër onkruiddruk en uitjies.
- Opvolgtoedienings kan met of sonder meganiese skoffelbewerking geskied, op voorwaarde dat onkruid nie groter as die aanbevole groeistadium is nie, waar hulle nie meer deur net die chemiese behandeling dood gemaak sal word nie.
- Waar opvolgtoedienings sonder meganiese skoffelbewerking geskied:
Vir toediening van Ammo SC - breëblaaronkruid mag nie groter as die 4-blaarstadium wees nie en grasse moet nog nie opgekom het nie.
Vir Ammo SC plus 2,4-D amien of **Trooper SL**, mag breëblaaronkruid nie groter as die 4 – 6 – blaarstadium wees nie en grasse moet nog nie opgekom het nie.
- Hou by die gebruiksbepelings vir opvolggewasse soos op die etikette aangedui van die triasienbevattende middels. Indien wisselbou toestande verlang word, word aanbeveel dat die atrasien SC dosis nie 2,0 ℓ/ha oorskry nie, Atra Super 600 SC moet nie 1,7 ℓ/ha oorskry nie en Ammo SC moet nie 1,85 ℓ/ha oorskry nie.
- Waar wisselbou met triasien sensitiewe gewasse toegepas word, moet die dosisse in die bogenoemde tabelle afgebring word waar die totale triasien per groeiseisoen nie 1,0 kg/ha oorskry nie.

- Wanneer atrasien SC of Atra Super 600 SC naopkoms toegedien word om breëblaaronkruid te beheer, moet Solitaire bygevoeg word teen die aanbevole dosis. Wanneer Ammo SC gebruik word, is adisionele benatter nie nodig nie.

ONKRUIDE WAT BEHEER SAL WORD DEUR Ultramoc S EC:

Grassoorte (net vooropkoms)

<i>Brachiaria eruciformis</i>	Litjiesinjalgras
<i>Chloris virgata</i>	Witpluim-Chloris
<i>Dactyloctenium aegyptium</i>	Hoenderspoor
<i>Digitaria sanguinalis</i>	Kruisvingergras
<i>Echinochloa crusgalli</i>	Hannepootmanna
<i>Eleusine indica</i>	Jongosgras
<i>Panicum maximum</i>	Gewone buffelsgras
<i>Panicum schinzii</i>	Soetbuffelsgras
<i>Pseudobrachiaria deflexa</i>	Bastersinjalgras
<i>Setaria pallide-fusca</i>	Rooiborselgras
<i>Setaria verticillata</i>	Klitsborselgras
<i>Tragus berteronianus</i>	Kleinwortelsaadgras
<i>Tragus racemosus</i>	Grootwortelsaadgras
<i>Urochloa mozabicensis</i>	Bosveldbeesgras
<i>Urochloa panicoides</i>	Beesgras

Wisselvallige beheer (vooropkoms)

<i>Amaranthus hybridus</i>	Gewone misbredie
<i>Amaranthus spinosus</i>	Doringmisbredie
<i>Amaranthus thunbergii</i>	Rooi misbredie
<i>Chenopodium carinatum</i>	Groenhondebossie
<i>Cleome monophylla</i>	Rusperbossie
<i>Commelina benghalensis</i>	Bengaalse wandelende Jood
<i>Cyperus esculentus</i>	Geelintjie
<i>Datura ferox</i>	Grootstinkblaar
<i>Datura stramonium</i>	Stinkblaar
<i>Galinsoga parviflora</i>	Knopkruid
<i>Nicandra physaloides</i>	Basterappelliefie
<i>Portulaca oleracea</i>	Porselein

NOTAS:

Die wisselvallige beheer van onkruid soos bogenoem is afhangelend van omgewingstoestande. Die vooropkomsbeheer van *Cyperus esculentus* is afhangelend van die volgende:

- Waar 'n dosis keuse gegee word moet die hoër dosis gebruik word.
- Voor aanplanting plaasvind, moet die grond met 'n skaarploeg bewerk word en 'n fyn, gelyk saadbed moet geskep word.
- **Ultramoc S EC** moet toegedien word binne 2 dae van die plantproses.
- Genoeg aanhoudende reën of besproeing (ten minste 15 mm op ligte gronde en 25 mm op swaar gronde) moet binne 7 dae van bespuiting val, sodat die onkruid doder geloog kan word tot in die ontkiemingsgebied.
- Geelintjie sal nie beheer word teen die verminderde dosis in TABEL 4. nie.

Om die spektrum van breëblaar onkruidbeheer te verbeter, word aanbeveel om van óf tenkingsels te maak of van opvolg bespuitings van standaard geregistreerde breëblaar onkruid doders te gebruik. Dié mengsels moet gebruik word deur die betrokke produk se etiket deeglik te volg.

Die registrasiehouer neem geen verantwoordelikheid aan, vir onkruid wat nie gelys is nie.

ERKENNING VAN HANDELSMERKE:

Atra Super 600 SC (L. 6500)	Icon Chemicals (Pty) Ltd
Solitaire (L. 6962)	Safagric
Atra Super 600 SC (L6500)	Icon Chemicals (Pty) Ltd