



MESOFLEX® 480 SC

Reg. no. L9541 Act/Wet 36 of/van 1947
N-AR 1485

A suspension concentrate herbicide for the pre-
and post-emergence control of broadleaf weeds
and grasses as well as suppression of some
weeds in maize.

'n Suspensiekonsentraat onkruiddoder vir die
vooropkom en na-opkom beheer van breëblaar-
en grasonkruide asook die onderdrukking van
sekere onkruide in mielies.

HRAC HERBICIDE GROUP CODE

F2

HRAC ONKRUIDDODERGROEPKODE

ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL

mesotrione (callistemone) 480 g/L mesotrioon (kallistemoon)

NET VOLUME/NETTO VOLUME

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REGISTRATION HOLDER/REGISTRASIEHOUER

ADAMA South Africa (Pty.) Ltd.

Reg. no. 1992/001741/07

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MESOFLEX® is the registered trademark of a company of the ADAMA GROUP.
MESOFLEX® is die geregistreerde handelsmerk van 'n maatskappy van die ADAMA GROEP.

CONTACT IN EMERGENCY/KONTAK IN NOOD

Griffon Poison Information Centre: +27 82 446 8946

Tygerberg Poison Information Centre: +27 21 931 6129

Batch number

.....

Lotnommer

Date of manufacture

.....

Datum van vervaardiging

UN no.: 3082



WARNINGS

Withholding periods (minimum number of days between last application and harvest):

Maize 56 days

- **DO NOT USE ON SWEETCORN OR POPCORN.**
- May cause skin and eye irritation.
- Store in a cool, dry place away from food and feedstuffs.
- Keep out of reach from children, uninformed persons and animals.
- **Re-entry:** Do not enter treated area until spray deposit has dried unless wearing protective clothing.
- **Aerial application:** PRE-EMERGENCE APPLICATIONS ONLY. Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings. Do not spray over water or allow the spray to drift over water or adjacent areas.

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not guarantee 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 weeds 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, and the environment or harm to man or animals 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

- Avoid inhaling fumes or spray mist.
- Wear protective clothes, e.g. face shield, overalls, gloves and boots, when handling the concentrate.
- Avoid skin contact. Wash immediately with soap and cold water after accidental skin contact.
- Take off contaminated clothes and wash on a daily basis.
- Do not eat, drink or smoke when mixing or applying or before hands and face have been washed.
- Avoid drifting of the spray mixture to other crops, grazing areas, rivers or dams or any other area that is not under treatment.
- Avoid spraying, draining or flushing of equipment near plants or trees and places where roots may extend.
- Clean applicator thoroughly after use and throw wash water where it will not contaminate food, grazing areas, rivers, dams and non-target areas.
- Invert the empty container over the mixing tank or spray tank and drain for at least 30 seconds after the flow has been reduced to a drip. Thereafter rinse the empty container at least three times with a volume of water equal to at least 10 % of that of the container. Add the rinsate into the spray tank.
- Perforate and flatten the empty container. Do not re-use for any other purpose

- Prevent contamination of food, feedstuffs, eating utensils and drinking water.

RESISTANCE WARNING

For the purpose of resistance management **MESOFLEX® 480 SC** is classified as an HRAC group code F2 herbicide. Any population of a specific weed may contain individuals that have a natural resistance against **MESOFLEX® 480 SC** or other group code F2 herbicides. If these herbicides are used repeatedly the resistant individuals can eventually dominate the weed population. These resistant weeds will probably not be controlled by **MESOFLEX® 480 SC** or any other group code F2 herbicide.

To delay herbicide resistance:

- Avoid the repeated exclusive use of herbicides in the same group code. Alternate with or tank mix with herbicides from other group codes.
- Integrate with other methods of control (chemical, biological and cultural) in weed control programmes.
- For specific information regarding the management of resistance contact the registration holder of this product.

USE RESTRICTIONS

- As **MESOFLEX® 480 SC** is very active, even at low dosage rates, all label instructions should be strictly adhered to. No deviations from the label recommendations regarding dosage rates, tank mixtures with other products and the adjuvants should be made.
- Should **MESOFLEX® 480 SC** be applied through irrigation, use the centre pivot system only.
- **MESOFLEX® 480 SC** should not be applied to sweetcorn and inbred parent lines of maize. Always consult relevant seed company or chemical supplier before applying **MESOFLEX® 480 SC** on new cultivars.
- Avoid disturbing treated soil as **MESOFLEX® 480 SC** effectiveness can be reduced through re-germination of weed seeds.
- Do not overlap spray swaths.

Pre-emergence application requirements

MESOFLEX® 480 SC must be applied on a weed free, moist, firm and fine seedbed without any clods or excessive plant rests. Preparation of the seedbed, planting of seed and application of **MESOFLEX® 480 SC** should be done as near as possible to each other. Plant rests may reduce residual activity of the herbicide. Rain or irrigation of 10–20 mm within 14 days after application is necessary to leach the product into the soil before weeds start to germinate. Dry soil conditions for prolonged periods after application may result in poor weed control. **MESOFLEX® 480 SC** should not be applied where flood irrigation is used. Do not tank mix **MESOFLEX® 480 SC** with organophosphate pesticides such as **PYRINEX® 250 CS** and **PYRINEX® 480 EC**. Avoid applying **MESOFLEX® 480 SC** under stress conditions which include low pH, excessive rain, cold soil conditions, poorly fertilised soils, waterlogged conditions, etc.

Post-emergence application requirements

At the time of application, weeds should be actively growing and should not be subject to any stress conditions such as cold temperatures over a long period, drought, heat, flooding etc. Extreme weather conditions, inadequate or abnormally high levels of moisture and prolonged overcast conditions can result in temporary bleaching injury to the crop. Apply **MESOFLEX® 480 SC** when true leaves are present. Please note that cotyledons are not the same as true leaves. Apply

MESOFLEX® 480 SC when the weeds are at the correct stage of growth. An adjuvant, based on a mineral oil (e.g. **MCW EOS**) must be added at the registered rate, when a post-emergence application of **MESOFLEX® 480 SC** is made. Do not apply tank mixtures of **MESOFLEX® 480 SC** and organophosphate or carbamate pesticides since this may result in crop damage. Apply **MESOFLEX® 480 SC** 4 weeks after soil applications of carbamate or organophosphate insecticides. Where foliar applications of carbamate or organophosphate insecticides are used, avoid using **MESOFLEX® 480 SC** within 7 days before or within 7 days after application. Do not apply **MESOFLEX® 480 SC** post-emergence through a centre-pivot irrigation system. Ensure that the spray mist does not contaminate adjacent crops.

Follow-up crops

Thorough cultivation of field before planting follow-up crops is imperative. **MESOFLEX® 480 SC** is broken down through microbial activity. If conditions are conducive to low microbial activity it will result in an extended period of herbicide activity.

Observe the following waiting periods before planting the next crop:

Potatoes	6 months
Soybeans and groundnuts	9 months
Sunflowers, dry beans and cotton	9 months
Wheat and barley	1 month
Grain sorghum	2 months
All remaining crops	24 months

NOTE: Do not use herbicides of the triazolopyrimidine or imidazolinone groups where **MESOFLEX® 480 SC** has been used the previous season, especially where the soil pH has been adjusted.

DIRECTIONS FOR USE

Use only as directed.

Compatibility

MESOFLEX® 480 SC is compatible with **MCW EOS** oil adjuvant, **ACETOGAN 900® EC**, **ACETOGAN PLUS® 768 EC**, **SUPRANEX 600 SC** and **LAMDEX® 5 EC**. It is advisable to always carry out a physical compatibility test prior to application when **MESOFLEX® 480 SC** is tank mixed with other pesticides.

Mixing instructions

Half fill the spray tank with clean water. Add the required volume of **MESOFLEX® 480 SC** to a small amount of water and mix thoroughly before it is added to the spray tank while agitating. When **MESOFLEX® 480 SC** is tank mixed with other products, first mix these products separately with water before it is added to spray tank. Do not allow the tank mixture to settle. **MCW EOS** oil adjuvant should be added last. Fill the spray tank with water to the required level while continuously agitating. Refer to the labels of the products **MESOFLEX® 480 SC** is to be tank mixed with and adhere to the label instructions.

APPLICATION

Ground application

MESOFLEX® 480 SC can be applied by any suitable tractor mounted boom sprayer which is correctly calibrated and has an efficient agitating system and distributes the spray solution evenly over the target area. It is recommended to apply **MESOFLEX® 480 SC** in 200–300 L water/ha, using suitable flat fan nozzles. Do not overlap swaths. **MESOFLEX® 480 SC** can also be applied in a water volume of 100 L/ha by using suitable nozzles for pre-emergence applications and sleeve boom sprayers for post emergence applications. Use correct nozzles, nozzle spacing, and nozzle sizes and an adjuvant such as **MCW EOS** at the correct rates. Ensure adequate coverage of target area. Failure to observe all these factors will result in poor weed control. When using the sleeve boom sprayer post-emergence applications, make sure the airflow system works correctly in order to obtain complete coverage of the target. Do not use the sleeve boom sprayer for pre-emergence applications of **MESOFLEX® 480 SC**.

Centre pivot application (pre-emergence applications only)

Only use the centre pivot irrigation system for the pre-emergence application of **MESOFLEX® 480 SC** and **ACETOGAN® PLUS 768 EC** in maize. Application should be carried out 2 days after planting. A well prepared field with no germinating weeds or established weeds is a pre-requisite. Ensure that the centre pivot is in perfect working condition and well equipped with an injector system and set to deliver between 4.5 mm and 7.5 mm water when applying **MESOFLEX® 480 SC** and **ACETOGAN® PLUS 768 EC** at the registered rates. Avoid contamination of dams and boreholes through spilling of chemicals into the irrigation system. The injector pump and water pump must be fitted with valves to stop injection once the centre pivot stops moving forward. Prevent treated water from moving back to the supply source by using a main irrigation water supply line fitted with a non-return valve. **LAMDEX® 5 EC** used at the registered rate can be applied with the **MESOFLEX® 480 SC** plus **ACETOGAN® PLUS 768 EC** for the control of cutworm.

Ensure that **MESOFLEX® 480 SC** and **ACETOGAN® PLUS 768 EC** is as uniformly distributed as the irrigation water. Avoid application through centre pivot system when the wind speed is greater than 15 km per hour. After the application of **MESOFLEX® 480 SC** over the entire centre pivot area, apply the following water volumes (depending on soil clay content):

CLAY %	WATER APPLIED/HA	REMARKS
< 20	10 mm	Soil should be kept in a wet condition for 7–14 days after application. Avoid over-application, which can occur through centre pivot breakdowns or stoppages and irrigation system overlap at the end of the irrigation cycle. Over-application can result in crop damage.
20–35	15 mm	
> 35	20 mm	

Aerial application (pre-emergence applications only)

Aerial application of **MESOFLEX® 480 SC** may only be done by a registered Aerial Application Operator using a correctly calibrated, registered aircraft according to the instructions of SANS 10118 (The aerial application of pesticides). 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:

- Volume: A spray mixture volume of 30–40 L per hectare is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy, or be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended above.
- Droplet coverage: 20–30 droplets per cm² must be recovered at the target area.

- Droplet size: A droplet spectrum with a VMD of 350–400 microns is recommended. Limit the production of fine droplets less than 150 microns (high drift and evaporation potential) to a minimum.
- Flying height: Maintain the height of the spray boom at 3–4 m above the target. Do not spray when aircraft dives, is in a climb or when banking
- Use suitable atomising equipment that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product. The spraying system must produce a droplet spectrum with the lowest possible Relative Span.
- Prevent droplets from entering the wingtip vortices by positioning the atomizers/nozzles within the inner 60–75 % of the wingspan.
- The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8 °C.
- Stop spraying if the wind speed exceeds 15 km/h.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day when rising thermals and downdraughts occur.
- Spraying under temperature inversion conditions (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80 % and above) may lead to the following:
 - a) Reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage).
 - b) Damage to other sensitive crops and/or non-target areas through drifting of the suspended spray cloud away from the target field.
- Do not carry out aerial application in cloudy weather with relative humidity over 80 % and air movement less than 5 km/h if sensitive crops are present within five kilometres of the closest aircraft spray path.
- Ensure 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 and that relevant data will be compiled in a logbook and kept for future reference.

APPLICATION RATES

- When applied as recommended below, a control period of 28–56 days can be achieved.
- Application of **MESOFLEX® 480 SC** can be pre- or post-emergence or a combination of pre- and post-emergence.
- For uniform distribution of the pre-emergence application, a weed free, even, firm and fine seedbed without any clods or excessive plant rests is a must.

Pre-emergence application rates

The dosage rate of **MESOFLEX® 480 SC** is not affected by soil clay content. For extended weed control the pre-emergence **MESOFLEX® 480 SC** treatment can be followed about 5–6 weeks later by a post emergence application of a tank mixture of **MESOFLEX® 480 SC**, **ACETOGAN® 900 EC** and **SUPRANEX 600 SC**, as recommendation on this label.

The following weeds are normally controlled by pre-emergence application of MESOFLEX® 480 SC plus ACETOGAN® PLUS 768 EC (or acetochlor S 250 g + atrazine 225 g + terbutylazine 225 g/L):

BOTANICAL NAME	COMMON NAME
MESOFLEX® 480 SC (104 ml/ha) plus ACETOGAN® PLUS 768 EC (900 ml/ha)	
<i>Acanthospermum hispidum</i>	Upright starbur
<i>Chenopodium album</i>	White goosefoot
<i>Echinocloa colona</i>	Marsh grass
<i>Nicandra physaloides</i>	Apple-of-Peru
<i>Physalis angulata</i>	Wild gooseberry
<i>Tagetes minuta</i>	Khaki weed
MESOFLEX® 480 SC (156 ml/ha) plus ACETOGAN® PLUS 768 EC (900 ml/ha)	
Weeds listed above PLUS:	
<i>Chenopodium carinatum</i>	Green goosefoot
<i>Setaria pallide-fusca</i>	Red bristle grass
<i>Eleusine coracana</i>	Goose grass
<i>Panicum schinzii</i>	Sweet buffalo grass
MESOFLEX® 480 SC (208 ml/ha) plus ACETOGAN® PLUS 768 EC (900 ml/ha)	
Weeds listed above PLUS:	
<i>Amaranthus hybridus</i>	Common pigweed
<i>Brachiaria eruciformis</i>	Sweet signal grass
<i>Datura ferox</i>	Large thorn apple
<i>Eragrostis curvula</i>	Weeping love grass
<i>Hibiscus trionum</i>	Bladder weed
<i>Polygonum aviculare</i>	Prostrate knotweed
<i>Crotalaria sphaerocarpa</i>	Mealie crotalaria
<i>Tribulus terrestris</i>	Devils thorn
<i>Cleome monophylla</i>	Spindle pod
<i>Commelina benghalensis</i>	Benghal wandering Jew
<i>Digitaria sanguinalis</i>	Crab fingergrass
<i>Hibiscus cannabinus</i>	Kenaf
MESOFLEX® 480 SC (260 ml) plus ACETOGAN® PLUS 768 EC (900 ml/ha)	
Weeds listed above PLUS:	
<i>Urochloa panicoides</i>	Herringbone grass
<i>Xanthium strumarium</i>	Cocklebur

BOTANICAL NAME	COMMON NAME
MESOFLEX® 480 SC (104 ml/ha) plus acetochlor S 250 g + atrazine 225 g + terbutylazine 225 g/L (2 400 ml/ha)	
<i>Acanthospermum hispidum</i>	Upright starbur
<i>Chenopodium album</i>	White goosefoot
<i>Echinocloa colona</i>	Marsh grass
<i>Nicandra physaloides</i>	Apple of Peru
<i>Physalis angulata</i>	Wild gooseberry
<i>Tagetes minuta</i>	Khaki weed
MESOFLEX® 480 SC (156 ml/ha) plus acetochlor S 250 g + atrazine 225 g + terbutylazine 225 g/L (2 400 ml/ha)	
Weeds listed above PLUS:	
<i>Chenopodium carinatum</i>	Green goosefoot
<i>Setaria pallide-fusca</i>	Red bristle grass
<i>Eleusine coracana</i>	Goose grass
<i>Panicum schinzii</i>	Sweet buffalo grass
MESOFLEX® 480 SC (208 ml/ha) plus acetochlor S 250 g + atrazine 225 g + terbutylazine 225 g/L (2 400 ml/ha)	
Weeds listed above PLUS:	
<i>Amaranthus hybridus</i>	Common pigweed
<i>Brachiaria eruciformis</i>	Sweet signal grass
<i>Datura ferox</i>	Large thorn apple
<i>Eragrostis curvula</i>	Weeping love grass
<i>Hibiscus trionum</i>	Bladder weed
<i>Polygonum aviculare</i>	Prostrate knotweed
<i>Crotalaria sphaerocarpa</i>	Mealie crotalaria
<i>Tribulus terrestris</i>	Devils thorn
<i>Cleome monophylla</i>	Spindlepod
<i>Commelina benghalensis</i>	Benghal wandering Jew
<i>Digitaria sanguinalis</i>	Crab fingergrass
<i>Hibiscus cannabinus</i>	Kenaf
MESOFLEX® 480 SC (260 ml/ha) plus acetochlor S 250 g + atrazine 225 g + terbutylazine 225 g/L (2 400 ml/ha)	
Weeds listed above PLUS:	
<i>Urochloa panicoides</i>	Herringbone grass
<i>Xanthium strumarium</i>	Cocklebur

Post-emergence application rates

Always apply the post-emergence treatment following a pre-emergence application of **MESOFLEX® 480 SC** plus **ACETOGAN® PLUS 768 EC**.

Apply **MESOFLEX® 480 SC** post-emergence when weeds to be controlled are at the following stages:

- Grasses: 2- to 3-leaf stage
- Broadleaf weeds: 2- to 6-leaf stage

The following weeds are normally controlled by **MESOFLEX® 480 SC** plus **ACETOGAN® 900 EC** plus **SUPRANEX 600 SC** plus an adjuvant such as MCW EOS:

BOTANICAL NAME	COMMON NAME
MESOFLEX® 480 SC (104 ml/ha) plus ACETOGAN® 900 EC (500 ml/ha) plus SUPRANEX 600 SC (416 ml/ha) plus MCW EOS (0.5 %)	
<i>Amaranthus hybridus</i>	Common pigweed
<i>Crotalaria sphaerocarpa</i>	Mealie crotalaria
<i>Galinsoga parviflora</i>	Gallant soldier
<i>Hibiscus trionum</i>	Bladder weed
<i>Tagetes minuta</i>	Tall Khaki
<i>Xanthium strumarium</i>	Cocklebur
<i>Cleome monophylla</i>	Spindlepod
<i>Datura ferox</i>	Large thorn apple
<i>Datura stramonium</i>	Thorn apple
MESOFLEX® 480 SC (156 ml/ha) plus ACETOGAN® 900 EC (500 ml/ha) plus SUPRANEX 600 SC (416 ml/ha) plus MCW EOS (0.5 %)	
All weeds listed above PLUS:	
<i>Bidens bipinnata</i>	Spanish blackjack
<i>Bidens pilosa</i>	Blackjack
<i>Citrullus lanatus</i>	Bitter apple
MESOFLEX® 480 SC (208 ml/ha) plus ACETOGAN® 900 EC (500 ml/ha) plus SUPRANEX 600 SC (416 ml/ha) plus MCW EOS (0.5 %)	
All weeds listed above PLUS:	
<i>Ipomoea purpurea</i>	Common morning glory
<i>Tribulus terrestris</i>	Devils thorn
<i>Digitaria sanguinalis</i>	Crab finger grass
<i>Eleusine coracana</i>	Goose grass
<i>Commelina benghalensis</i>	Benghal wandering Jew

BOTANICAL NAME	COMMON NAME
MESOFLEX® 480 SC (260 ml/ha) plus ACETOGAN® 900 EC (500 ml/ha) plus SUPRANEX 600 SC (416 ml/ha) plus MCW EOS (0.5 %)	
All weeds listed above PLUS: <i>Hibiscus cannabinus</i>	Kenaf

The following weeds are normally suppressed (up to 80 % suppression) by the treatment indicated:

MESOFLEX® 480 SC (260 ml/ha) plus ACETOGAN® 900 EC (500 ml/ha) plus SUPRANEX 600 SC (416 ml/ha) plus MCW EOS (0.5 %)	
<i>Chloris virgata</i>	Feathertop chloris
<i>Cyperus esculentus</i>	Yellow nutsedge
<i>Urochloa panicoides</i>	Herringbone grass

ACETOGAN® 900 EC (L8269) is the registered trademark of a company of the ADAMA GROUP.

ACETOGAN® PLUS 768 EC (L8557) is the registered trademark of a company of the ADAMA GROUP.

MCW EOS (L7954) is a trademark of a company of the ADAMA GROUP.

LAMDEX® 5 EC (L7578) is the registered trademark of a company of the ADAMA GROUP.

PYRINEX® 480 EC (L4673) is the registered trademark of a company of the ADAMA GROUP.

PYRINEX® 250 CS (L6515) is the registered trademark of a company of the ADAMA GROUP.

SUPRANEX 600 SC (L5351) is a trademark of a company of the ADAMA GROUP.

WAARSKUWINGS

Onthoudingsperiodes (minimum aantal dae tussen laaste toediening en oes):

Mielies 56 dae

- **MOET NIE OP SUIKER- EN SPRINGMIELIES GEBRUIK WORD NIE.**
- Mag oog- en velirritasie veroorsaak.
- Berg in 'n koel, droë plek weg van voedsel en voer.
- Hou buite bereik van kinders, oningesigte persone en diere.
- **Herbetreding:** Moet nie die behandelde gebied betree voordat die sputstof droog is nie tensy beskermende oorklere gedra word.
- **Lugtoediening:** VOOROPKOMTOEDIENINGS ALLEENLIK. Stel alle inwoners in die onmiddelike omgewing wat gespuit gaan word in kennis en reik die nodige waarskuwings uit. Moet nie oor water spuit of toelaat dat die spuitnewel daaroor dryf of aanliggende 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 onkruide teen die betrokke middel sowel as die tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid 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.

VOORSORGMAATREËLS

- Moet nie dampe of die sproeinewel inasem nie.
- Dra beskermende klere bv. gesigskerm, oorpak, handskoene en skoene as konsentraat hanteer word.
- Vermy kontak met vel. Was dadelik met koue water en seep indien dit per ongeluk met vel in aanraking kom.
- Trek besoedelde klere uit en was dit daagliks.
- Moet nie eet, drink of rook tydens vermenging of toediening of voordat hande en gesig gewas is nie.
- Verhoed dat die spuitnewel wegdryf oor ander gewasse, weiding, riviere, damme en gebiede wat nie behandel moet word nie.
- Vermy bespuiting, dreinering, of uitspoel van sputtoerusting naby plante of bome of plekke waar wortels mag voorkom.
- Maak sputapparaat skoon na gebruik en gooi waswater weg waar dit nie gewasse, weiding, riviere, damme of nie-teikengebiede sal besoedel nie.
- Keer die leëhouer om oor die spuit- of mengtenk en laat dit dreineer vir ten minste 30 sekondes nadat die vloeistof tot 'n gedrup verminder het. Spoel die leëhouer daarna drie keer uit met 'n

volume water gelykstaande aan minstens 10 % van die volume van die houer. Gooi die spoelwater in die meng- of spuittenk voor die leë houer vernietig word.

- Vernietig die leë houer deur gate daarin te maak en moet dit vir geen ander doel gebruik nie.
- Verhoed besoedeling van voedsel, voer, drinkwater en eetgerei.

WEERSTANDSWAARSKUWING

Vir die doel van weerstandsbestuur is **MESOFLEX® 480 SC** as 'n HRAC groepkode F2 onkruiddoder geklassifiseer. Enige onkruidpopulasie mag individue bevat wat 'n natuurlike weerstand teen **MESOFLEX® 480 SC** en ander groepkode F2 onkruiddoders het. Die weerstandbiedende individue kan uiteindelik die onkruidpopulasie oorheers as hierdie onkruiddoders herhaaldelik gebruik word. Hierdie weerstandbiedende onkruide mag dalk nie deur **MESOFLEX® 480 SC** of ander groepkode F2 onkruiddoders beheer word nie.

Om onkruiddoderweerstand te vertraag:

- Vermy die uitsluitlike herhaalde gebruik van onkruiddoders van dieselfde onkruiddodergroepkode. Wissel af, of gebruik in tenkmengsels met middels van ander groepkodes.
- Integreer beheermetodes (chemiese, bewerking, biologies) in onkruid beheerprogramme.
- Vir meer spesifieke inligting rakende weerstandsbestuur, skakel die registrasiehouer van hierdie produk.

GEBRUIKSBEPERKINGS

- Aangesien **MESOFLEX® 480 SC** baie aktief is selfs teen lae dosisse, moet alle etiketaanwysings noukeurig gevolg word. Daar mag nie van die etiketaanbevelings t.o.v. dosisse, tenkmengsels met ander produkte en bevorderingsmiddels, afgewyk word nie.
- Indien **MESOFLEX® 480 SC** toegedien gaan word tydens besproeiing mag dit alleenlik deur spilpuntbesproeiing toegedien word.
- **MESOFLEX® 480 SC** moet nie op suikermielies of ingeteelde ouerlyne van mielies toegedien word nie. Raadpleeg altyd die betrokke saadmaatskappy of chemiese verskaffer voordat **MESOFLEX® 480 SC** op nuwe kultivars gebruik word.
- Vermy die versteuring van behandelde grond aangesien **MESOFLEX® 480 SC** se effektiewiteit verminder kan word as gevolg van die herontkieming van onkruidsade.
- Vermy die oorvleueling van spuitbane.

Vooropkomstoedieningsvereistes

MESOFLEX® 480 SC moet toegedien word op 'n onkruidvrye, klam, fyn en ferm saadbed sonder enige kluite of oormatigde plantreste. Voorbereiding van die saadbed, planting van saad en toediening van **MESOFLEX® 480 SC** moet so na aan mekaar as moontlik plaasvind. Plantreste mag die nawerking van die onkruiddoder verminder. Reën of besproeiing van 10-20 mm binne 14 dae na toediening is nodig om die produk in die grond in te loog voordat die onkruide begin ontkiem. Droë grondtoestande vir lang tydperke na toediening mag swak onkruidbeheer veroorsaak. **MESOFLEX® 480 SC** moet nie gebruik word nie waar vloedbesproeiing toegepas word. Moet nie **MESOFLEX® 480 SC** tenkmengsels maak met organofosfaatplaaggodders soos **PYRINEX® 250 CS** en **PYRINEX® 480 EC** nie. Moet nie **MESOFLEX® 480 SC** onder stremmingstoestande soos lae pH, oormatige reën, koue grondtoestande, versuiptoestande, onvoldoende bemesting ens. gebruik nie.

Naopkomstoedieningsvereistes

Dien toe op aktief groeiende onkruide wat nie aan stremmingstoestande soos lae temperature oor lang periodes, droogte, hitte, versuiping ens. blootgestel is nie. Abnormale weerstoestande, onvoldoende of abnormale hoe^e vogvlakke en lang bewolkte tydperke mag tydelike verbleikingskade aan die gewas veroorsaak. Dien **MESOFLEX® 480 SC** wanneer die ware blare teenwoordig is. Let daarop dat saadlobbe nie ware blare is nie. **MESOFLEX® 480 SC** moet toegedien word wanneer die onkruide die korrekte groeistadium bereik het. Vir na-opkom toedienings van **MESOFLEX® 480 SC** moet 'n bevorderinsmiddel wat op minerale olie gebasseer is (bv. MCW EOS) teen die geregistreerde dosis bygevoeg word. Moet nie **MESOFLEX® 480 SC** tenkmengsels maak met karbamaat- of organofosfaatplaagdoders nie aangesien dit gewasskade kan veroorsaak. Dien **MESOFLEX® 480 SC** 4 weke na grontoedienings van karbamaat- of organofosfaatinsekodders toe. Waar blaarbepsuitings van karbamaat- en organofosfaatinsekodders toegedien word moet die toediening van **MESOFLEX® 480 SC** 7 dae voor en 7 dae na sulke toedienings vermy word. Moet nie **MESOFLEX® 480 SC** na-opkom deur 'n spilpuntbesproeiingstelsel toedien nie. Maak seker dat die sputnewel nie aangrensende gewasse sal kontamineer nie.

Opvolggewasse

Deeglike bewerking van die land voor die plant van opvolggewasse is noodsaaklik. **MESOFLEX® 480 SC** word mikrobies afgebreek. Indien toestande gunstig is vir lae mikrobiële aktiwiteit sal dit veroorsaak dat die onkruiddoder langer in die grond aktief sal bly.

Volg die onderstaande wagperiodes voordat die die volgende gewas geplant word:

Aartappels	6 maande
Sojabone en grondbone	9 maande
Sonneblomme, droëbone en katoen	9 maande
Koring en gars	1 maand
Graansorghum	2 maande
Alle ander gewasse	24 maande

NOTA: Moet nie onkruiddoders van die triasolopirimidien- of imidasolinoongroep gebruik nie indien **MESOFLEX® 480 SC** die vorige seisoen gebruik was, veral waar die pH van die grond verstel was.

GEBRUIKSAANWYSINGS

Gebruik alleenlik soos voorgeskryf.

Verenigbaarheid

MESOFLEX® 480 SC is verenigbaar met **MCW EOS** oliebevorderingsmiddel, **ACETOGAN® 900 EC**, **ACETOGAN® PLUS 768 EC**, **SUPRANEX 600 SC** en **LAMDEX® 5 EC**. Dit word egter aanbeveel dat 'n fisiese verenigbaarheidstoets gedoen word voor toediening, indien tenkmengsels met **MESOFLEX® 480 SC** gemaak gaan

Menginstruksies

Vul die spuittenk halfvol met skoon water. Voeg die benodigde hoeveelheid **MESOFLEX® 480 SC** by 'n klein hoeveelheid water, meng deeglik en voeg dit dan in die tenk by terwyl geroer word. Indien

MESOFLEX® 480 SC met ander middels in 'n tenkmengsel gebruik gaan word, meng hierdie middels eers afsonderlik met 'n klein hoeveelheid water voordat dit in die tenk bygevoeg word. Moet nie die tenkmengsel toelaat om uit te sak nie. **MCW EOS** oliebevorderingsmiddel moet laaste bygevoeg word. Vul die sputtentk met water tot die verlangde vlak terwyl voortdurend geroer word. Verwys na die etikette van middels waarmee **MESOFLEX® 480 SC** gemeng gaan word en sorg dat die etiketaanwysings nagekom word.

TOEDIENING

Grondtoediening

MESOFLEX® 480 SC kan met enige geskikte trekker gemonteerde balkspuit toegedien word wat korrek gekalibreer is, 'n doeltreffende roersisteem het en in staat is om die spuitmengsel eweredig oor die teikengebied te versprei. Dit word aanbeveel dat **MESOFLEX® 480 SC** met geskikte platwaaierspuitstukke in 200–300 L water/ha toegedien word. Spuitbane mag nie oorvleuel nie. **MESOFLEX® 480 SC** kan ook in 'n water volume van 100 L/ha toegedien word deur die gebruik van geskikte spuitstukke vir vooropkom toedienings asook kousbalkspuite vir na-opkom toedienings. Gebruik die korrekte spuitstukke, spuitstukspasiëring, spuitstukgroottes en 'n geskikte bevorderingsmiddel soos **MCW EOS** teen die korrekte dosis. Verseker voldoende bedekking van die teikengebied. Indien hierdie vereistes nie nagekom word nie kan dit lei tot swak onkruidbeheer. Vir na-opkom toedienings met kousbalkspuite moet seker gemaak word dat die lugvloeisisteem korrek werk om algehele bedekking van die teikenplante te verkry. Moet nie **MESOFLEX® 480 SC** vooropkom toedien met 'n kousbalkspuit nie.

Spilpunttoedienings (vooropkomstoedienings alleenlik)

Gebruik alleenlik spilpuntbesproeiingstelsels vir die vooropkom toediening van **MESOFLEX® 480 SC** en **ACETOGAN® PLUS 768 EC** in mielies. Dien 2 dae na plant toe. Dit is 'n vereiste dat die saadbed goed voorberei moet wees sonder enige ontkiemende onkruid of gevestigde onkruid. Maak seker dat die spilpunt in 'n goeie werkende toestand is, toegerus is met 'n inspuitsisteem en gestel is om tussen 4.5 tot 7.5 mm water te lewer wanneer **MESOFLEX® 480 SC** en **ACETOGAN® PLUS 768 EC** teen die geregistreerde dosis toegedien word. Vermy die besoedeling van damme en boorgate deur die mors van chemikalieë in die besproeiingstelsel. Die inspuitpomp en waterpomp moet toegerus wees met kleppe wat inspuiting sal staak sodra die spilpunt ophou om vorentoe te beweeg. Voorkom dat die behandelde water terug na die voorsieningsbron beweeg deur 'n niederugklep in die hoofbesproeiingswater aanbodlyn te plaas. **LAMDEX® 5 EC** kan teen die geregistreerde dosis vir die beheer van snywurms saam met **MESOFLEX® 480 SC** plus **ACETOGAN® PLUS 768 EC** toegedien word.

Maak seker dat **MESOFLEX® 480 SC** en **ACETOGAN® PLUS 768 EC** net so eweredig soos die besproeiingswater toegedien word. Vermy spilpunttoediening is die windspoed meer as 15 km per uur is. Nadat **MESOFLEX® 480 SC** oor die hele spilpuntgebied toegedien is, moet dit opgevolg word deur die volgende water volumes (afhangende van die klei-inhoud van die grond):

KLEI %	WATER TOEGEDIEN / HA	OPMERKINGS
< 20	10 mm	Die grond moet klam gehou word vir 7–14 dae na toediening. Vermy oordosering wat kan volg indien die spilpunt sou breek, verstop asook die oorvleueling teen die einde van die besproeiingssiklus. Oordosering kan gewasskade veroorsaak.
20–35	15 mm	
> 35	20 mm	

Lugtoediening (vooropkomstoedienings alleenlik)

Lugtoediening van **MESOFLEX® 480 SC** mag alleenlik deur 'n geregistreerde Lugbespuitingsoperator met 'n korrek gekalibreerde geregistreerde vliegtuig volgens die instruksies van SANS 10118 (The aerial application of pesticides), toegedien word. Maak seker dat die spuitmengsel eweredig oor die teikengebied versprei word en dat die verlies aan spuitmengsel tot die minimum beperk word. Die volgende vereistes moet nagekom word:

- Volume: 'n Spuitmengsel volume van 30–40 L/ha word aanbeveel. Hierdie produk is nie teen 'n verlaagde volume getoets nie. Die registrasiehouer kan nie effektiwiteit waarborg, of verantwoordelik gehou word vir enige nadelige effekte indien hierdie produk teen 'n laer volume, as hierbo aanbeveel, toegedien word nie.
- Druppelbedekking: 20-30 druppels/cm² moet op die teikenarea herwin word.
- Druppelgrootte: 'n Druppelspektrum met 'n VMD van 350-400 mikron word aanbeveel. Beperk die produksie van druppels kleiner as 150 mikron (hoë drywing en verdampingspotensiaal) tot 'n minimum.
- Vlieghoogte: Handhaaf 'n hoogte van die spuitbalk bo die teiken op 3-4 m. Moet nie spuit wanneer die vliegtuig duik, klim of draai nie.
- Gebruik gesikte atomiseringsapparaat wat die vereiste druppelgrootte en bedekking sal produseer, maar die minste verlies van produk verseker. Die spuitstelsel moet 'n druppelspektrum met die kleinste moontlike Relatiewe Span produseer.
- Plaas al die atomiseerders in die binneste 60-75 % van die vlerkspan om te verhoed dat druppels binne-in die vlerkpuntvorteks beweeg.
- Die verskil in temperatuur tussen die nat- en droëboltermometer van 'n swaaihigrometer, moet nie 8 °C oorskry nie.
- Stop bespuiting indien die windspoed 15 km/uur oorskry.
- Stop bespuiting tydens turbulente, onstabiele en droë toestande gedurende die hitte van die dag.
- Bespuiting onder temperatuur inversie toestande (deur bo of binne die inversielaaq te spuit) en/of hoë lugvog toestande (relatiewe humiditeit 80 % en meer) mag tot volgende probleme aanleiding gee:
 - a) verlaagde doeltreffendheid aangesien die druppels as 'n wolk in die lug bly hang en moontlik verdamp (onvoldoende bedekking op teiken).
 - b) skade aan nie-teiken gewasse of sensitiewe areas as gevolg van wegdrywing van die spuitwolk na nie-teiken areas.
- Verseker dat die Lugbespuitingsoperator presies weet watter lande bespuit moet word.
- Dit is noodsaaklik om 'n versekering van die Lugbespuitingsoperator te verkry dat aan al die bogenoemde vereistes voldoen sal word en dat data van belang in 'n logboek saamgevat is vir toekomstige verwysing.

TOEDIENINGSHOEVEELHEDE

- Wanneer toegedien word soos hieronder aanbeveel, is die tydperk van beheer 28–56 dae.
- **MESOFLEX® 480 SC** kan voor opkoms of na opkoms toegedien word asook 'n kombinasie van voor- en naopkomstoedienings.
- Vir die eweredige verspreiding van vooropkom toedienings is dit 'n vereiste dat die saadbed vry van onkruid, gelyk, ferm, fyn en sonder enige kluite of oormatigde reste van plante moet wees.

Vooropkomstoedieningsdosisse

Die dosis van **MESOFLEX® 480 SC** word nie deur die klei-inhoud van die grond beïnvloed nie. Vir verlengde onkruidebeheer kan die vooropkom toediening van **MESOFLEX® 480 SC** na 5–6 weke opgevolg word deur 'n na-opkom toediening van **MESOFLEX® 480 SC**, **ACETOGAN® 900 EC** en **SUPRANEX 600 SC** tenkmengsel, soos aanbeveel op hierdie etiket.

Die volgende onkruide word normaalweg beheer deur vooropkomstoedienings van **MESOFLEX® 480 SC plus ACETOGAN® PLUS 768 EC** (of asetochloor S 250 g + atrasien 225 g + terbutilasien 225 g/L):

BOTANIESE NAAM	GEWONE NAAM
MESOFLEX® 480 SC (104 ml/ha) plus ACETOGAN® PLUS 768 EC (900 ml/ha)	
<i>Acanthospermum hispidum</i>	Regopsterklits
<i>Chenopodium album</i>	Withondebossie
<i>Echinocloa colona</i>	Moerasgras
<i>Nicandra physaloides</i>	Basterappelliefie
<i>Physalis angulata</i>	Wildeappelliefie
<i>Tagetes minuta</i>	Kakiebos
MESOFLEX® 480 SC (156 ml/ha) plus ACETOGAN® PLUS 768 EC (900 ml/ha)	
Onkruide hierbo gelys PLUS:	
<i>Chenopodium carinatum</i>	Groenhondebossie
<i>Setaria pallide-fusca</i>	Tuinsetaria
<i>Eleusine coracana</i>	Jongosgras
<i>Panicum schinzii</i>	Soetbuffelsgras
MESOFLEX® 480 SC (208 ml/ha) plus ACETOGAN® PLUS 768 EC (900 ml/ha)	
Onkruide hierbo gelys PLUS:	
<i>Amaranthus hybridus</i>	Gewone misbredie
<i>Brachiaria eruciformis</i>	Litjiesinjaalgras
<i>Datura ferox</i>	Grootstinkblaar
<i>Eragrostis curvula</i>	Oulandsgras
<i>Hibiscus trionum</i>	Terblansbossie
<i>Polygonum aviculare</i>	Voëlduisendknoop
<i>Crotalaria sphaerocarpa</i>	Mielie Crotalaria
<i>Tribulus terrestris</i>	Dubbeltjie
<i>Cleome monophylla</i>	Rusperbossie
<i>Commelina benghalensis</i>	Bengaalse wandelende Jood
<i>Digitaria sanguinalis</i>	Kruisvingergras
<i>Hibiscus cannabinus</i>	Wildestokroos

BOTANIESE NAAM	GEWONE NAAM
MESOFLEX® 480 SC (260 ml/ha) plus ACETOGAN® PLUS 768 EC (900 ml/ha)	
Onkruide hierbo gelys PLUS:	
<i>Urochloa panicoides</i>	Tuin-Urochloa
<i>Xanthium strumarium</i>	Kankerroos
MESOFLEX® 480 SC (104 ml/ha) plus asetochloor S 250 g + atrasien 225 g + terbutilasien 225 g/L (2 400 m/ha)	
<i>Acanthospermum hispidum</i>	Regopsterklits
<i>Chenopodium album</i>	Withondebossie
<i>Echinocloa colona</i>	Moerasgras
<i>Nicandra physaloides</i>	Basterappelliefie
<i>Physalis angulata</i>	Wildeappelliefie
<i>Tagetes minuta</i>	Kakiebos
MESOFLEX® 480 SC (156 ml/ha) plus asetochloor S 250 g + atrasien 225 g + terbutilasien 225 g/L (2 400 ml/ha)	
Onkruide hierbo gelys PLUS:	
<i>Chenopodium carinatum</i>	Groenhondebossie
<i>Setaria pallide-fusca</i>	Tuinsetaria
<i>Eleusine coracana</i>	Jongosgras
<i>Panicum schinzii</i>	Soetbuffelsgras
MESOFLEX® 480 SC (208 ml/ha) plus asetochloor S 250 g + atrasien 225 g + terbutilasien 225 g/L (2 400 ml/ha)	
Onkruide hierbo gelys PLUS:	
<i>Amaranthus hybridus</i>	Gewone misbredie
<i>Brachiaria eruciformis</i>	Litjiesinjaalgras
<i>Datura ferox</i>	Grootstinkblaar
<i>Eragrostis curvula</i>	Oulandsgras
<i>Hibiscus trionum</i>	Terblansbossie
<i>Polygonum aviculare</i>	Voëlduisendknoop
<i>Crotalaria sphaerocarpa</i>	Mielie Crotalaria
<i>Tribulus terrestris</i>	Dubbeltjie
<i>Cleome monophylla</i>	Rusperbossie
<i>Commelina benghalensis</i>	Bengaalse wandelende Jood
<i>Digitaria sanguinalis</i>	Kruisvingergras
<i>Hibiscus cannabinus</i>	Wildestokroos

MESOFLEX® 480 SC (260 ml/ha) plus asetochloor S 250 g + atrasien 225 g + terbutilasien 225 g/L (2 400 ml/ha)

Onkruide hierbo gelys PLUS:

Urochloa panicoides

Xanthium strumarium

Beesgras

Kankerroos

Naopkomstoedieningshoeveelhede

Die naopkomstoediening moet altyd volg op 'n vooropkomstoediening van **MESOFLEX® 480 SC** plus **ACETOGAN® PLUS 768 EC**.

Dien **MESOFLEX® 480 SC** na-opkom toe wanneer die onkruide wat beheer moet word by die volgende stadiums is:

- Grasse: 2-3 blaarstadium
- Breëblaaronkruide: 2-6 blaarstadium

Die volgende onkruide word normaalweg beheer deur **MESOFLEX® 480 SC** plus **ACETOGAN® 900 EC** plus **SUPRANEX 600 SC** plus 'n bevorderingsmiddel soos MCW EOS:

BOTANIESE NAAM	GEWONE NAAM
MESOFLEX® 480 SC (104 ml/ha) plus ACETOGAN® 900 EC (500 ml/ha) plus SUPRANEX 600 SC (416 ml/ha) plus MCW EOS (0.5 %)	
<i>Amaranthus hybridus</i>	Gewone misbredie
<i>Crotalaria sphaerocarpa</i>	Mielie Crotalaria
<i>Galinsoga parviflora</i>	Knopkruid
<i>Hibiscus trionum</i>	Terblansbossie
<i>Tagetes minuta</i>	Kakiebos
<i>Xanthium strumarium</i>	Kankerroos
<i>Cleome monophylla</i>	Rusperbossie
<i>Datura ferox</i>	Grootstinkblaar
<i>Datura stramonium</i>	Stinkblaar
MESOFLEX® 480 SC (156 ml/ha) plus ACETOGAN® 900 EC (500 ml/ha) plus SUPRANEX 600 SC (416 ml/ha) plus MCW EOS (0.5 %)	
Onkruide hierbo gelys PLUS:	
<i>Bidens bipinnata</i>	Spaanse knapsekêrel
<i>Bidens pilosa</i>	Knapsekêrel
<i>Citrullus lanatus</i>	Karkoer

BOTANIESE NAAM	GEWONE NAAM
MESOFLEX® 480 SC (208 ml/ha) plus ACETOGAN® 900 EC (500 ml/ha) plus SUPRANEX 600 SC (416 ml/ha) plus MCW EOS (0.5 %)	
Onkruide hierbo gelys PLUS:	
<i>Ipomoea purpurea</i>	Purperwinde
<i>Tribulus terrestris</i>	Dubbeltjie
<i>Digitaria sanguinalis</i>	Kruisvingergras
<i>Eleusine coracana</i>	Jongosgras
<i>Commelina benghalensis</i>	Bengaalse wandelende Jood
MESOFLEX® 480 SC (260 ml/ha) plus ACETOGAN® 900 EC (500 ml/ha) plus SUPRANEX 600 SC (416 ml/ha) plus MCW EOS (0.5 %)	
Onkruide hierbo gelys PLUS:	
<i>Hibiscus cannabinus</i>	Wildestokroos

Die volgende onkruide sal normaalweg onderdruk word (tot 80 % onderdrukking) deur die aangeduide behandeling:

MESOFLEX® 480 SC (260 ml/ha) plus ACETOGAN® 900 EC (500 ml/ha) plus SUPRANEX 600 SC (416 ml/ha) plus MCW EOS (0.5 %)
<i>Chloris virgata</i>
<i>Cyperus esculentus</i>
<i>Urochloa panicoides</i>

ACETOGAN®PLUS 768 EC (L8557) is die geregistreerde handelsmerk van 'n maatskappy van die ADAMA GROEP.

MCW EOS (L 7954) is die handelsmerk van 'n maatskappy van die ADAMA GROEP.

SUPRANEX 600 SC (L5351) is die handelsmerk van 'n maatskappy van die ADAMA GROEP.

PYRINEX®480 EC (L4673) is die geregistreerde handelsmerk van 'n maatskappy van die ADAMA GROEP.

PYRINEX®250 CS (L6515) is die geregistreerde handelsmerk van 'n maatskappy van die ADAMA GROEP.

ACETOGAN® 900 EC (L8269) is die geregistreerde handelsmerk van 'n maatskappy van die ADAMA GROEP.

LAMDEX®5 EC (L7578) is die geregistreerde handelsmerk van 'n maatskappy van die ADAMA GROEP.