



MAKHROMECTIN

Reg No. L 7941 Act / Wet 36 / 1947
N-AR 0869

A translaminar emulsifiable concentrate insecticide and acaricide acting as a direct contact and stomach poison for the control of Red mites, American leafminer and thrips on crops as listed

‘n Translaminêre emulsifiseerbare insekte en mytdoder vir die beheer van Rooimyte, Amerikaanse blaarmyners en Blaaspootjies in gewasse soos aangedui. Dit werk as ’n direkte kontak of maagdoder

ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL

Abamectin

18 g / ℥

Abamektien

NET VOLUME / NETTO VOLUME

REGISTRATION HOLDER / REGISTRASIEHOUER:

Makhro-Agro SA (Pty) Ltd
Reg. No. 1994/001973/07
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Batch number Lotnommer

Date of manufacture Datum van vervaardiging



TOXIC / GIFTIG



GROUP Ib: Red Band

WARNINGS:

Allow the following number of days between last application and harvesting:

Apples.....	14 days
Citrus.....	3 days
Cotton.....	21 days
Pears.....	7 days
Strawberries.....	3 days
Tomatoes.....	3 days

- Handle with extreme care
- Store under lock and key
- Do not allow animals to feed on treated foliage
- Do not use in orchards interplanted with other crops
- Do not enter treated area without protective clothing until the spray deposit is dry
- Unprotected workers must vacate the area before it is treated
- Poisonous if swallowed, inhaled or absorbed through the skin
- Avoid contact with skin or wyes since product is eye irritant and may cause skin irritation
- Store away from food and feeds, fertilizers and other chemicals
- Keep out of reach of children, uninformed persons and animals
- Toxic to fish and wild life
- Toxic to bees if exposed to direct spray contact – do not spray during periods of high bee activity

Flammable:

Do not handle **MAKHROMECTIN** near heat or open flame

In case of poisoning call a medical doctor and make this label available to him / her.

Aerial application:

Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas. Do not apply by aircraft to orchards.

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

PRECAUTIONS:

- Do not eat, drink or smoke while handling this product
- Prevent contamination of food, feeds, drinking water and eating utensils
- Wear eye protection, respirator, rubber gloves and overall when handling the concentrate
- Wear rubber gloves and overalls when spraying
- Change and wash contaminated clothes after use daily
- Do not inhale the spray mist
- Avoid skin and eye contact with the spray
- Avoid spray drift onto other crops, grazing, rivers, dams and areas not under treatment
- Clean applicator thoroughly after use and dispose of wash water where it will not contaminate crops, grazing, rivers or dams
- Wash yourself after spraying
- Store in a cool, dry place away from sunlight
- Rinse the container three times with a volume of water equal to a minimum of 10 % of the container. Add the rinsings to the contents of the spray tank.
- Destroy the container by perforation and do not use for any other purpose

SYMPTOMS OF HUMAN POISONING:

Possible signs of poisoning will be initially the dilation of the pupils, slow breathing and sedation. More severe poisoning may cause lethargy, muscle tremors and convulsions

FIRST AID:

- Inhalation: Remove the patient to a well ventilated area, away from the source of poisoning. Give artificial respiration or closed cardiac massage if necessary. Maintain open airway passages
- Ingestion: Obtain medical attention immediately
- Skin: Remove contaminated clothing and wash contaminated area thoroughly with plenty of water and soap. Do not rub the skin hard
- Eyes: Flush thoroughly with clean water for at least 15 minutes

GET MEDICAL ATTENTION IN ALL CASES

NOTE TO PHYSICIAN:

- Antidote: Emetine syrup or ephedrine may be taken. Do not treat with drugs which can increase the activity of GABA, such as barbital or propyl valenic acid in emergency

DIRECTIONS FOR USE:

Use only as indicated

- Use only clean water in spray mixture
- Always ensure that spray equipment is clean, and correctly calibrated before spraying
- **MAKHROMECTIN** is effective for the control of adult and immature stages of spider mites, thrips and larval stages of American leafminer
- **MAKHROMECTIN** is rapidly absorbed into the plant tissue

- Over-spraying may result in less effective control due to loss of active material because of run-off from the leaf surfaces.
- **MAKHROMECTIN** can be used as a preventative or corrective treatment in cotton or tomatoes for the control of red spider mites.
- **MAKHROMECTIN** has the minimum effect on natural enemies of mites, thrips and American leafminer.
- On apples and pears, **MAKHROMECTIN** is most suited for use in the IPM program, as well as where adequate control of spider mites is not being maintained by natural enemies.
- **MAKHROMECTIN** is in general slow acting and although mites and leafminers become immobilized soon after exposure, between 3 and 5 days in necessary, depending on ambient temperatures to achieve maximum mortality. During this period feeding and plant damage by the pest is minimal.

RESISTANCE MANAGEMENT:

Due to inherent risk of resistance development to any product, it is strongly recommended that **MAKHROMECTIN** is used in a good resistance prevention programme. This programme should include the use of products with different modes of action and from different chemical groups. Applications should be made based on scouting results for the pests.

Do not apply more than;

3 sprays of **MAKHROMECTIN** per season on cotton,
 4 sprays at the lowest rate recommended per season on Apples and Pears
 2 sprays per season on citrus
 4 sprays on strawberries per growing season,
 5 sprays per season on tomatoes,
 4 sprays per crop for herbaceous plants and
 4 sprays per season on perennial crops

COMPATIBILITY:

MAKHROMECTIN may be mixed with molasses for aerial application on cotton. If tank mixtures with synthetic pyrethroids are applied on cotton, use the lowest recommended dose for weekly applications. **MAKHROMECTIN** may be mixed with approved light mineral spray oils on apples, pears and citrus. **MAKHROMECTIN** does not require the addition of surfactants / adjuvants to the spray mixture. Since all combinations and sequences of sprays have not been fully evaluated, it is recommended not to tankmix any chemical with **MAKHROMECTIN**. Contact your local distributor for up-to-date information on different tank mixtures.

MIXING INSTRUCTIONS:

Measure out the required quantity of **MAKHROMECTIN** and premix this with at least 10 litres of water. Half fill the spray tank with clean water, add the required quantity of premixed **MAKHROMECTIN**. If any other product is to be tankmixed with **MAKHROMECTIN** e.g light mineral oil, the required volume of that product must also be pre-mixed as above before adding the mixture to the spraytank. The water in the spraytank must be continuously agitated while the pre-mixture is added. Fill the spray tank with water while maintaining agitation to ensure thorough mixing of the chemicals. Maintain agitation during the spraying operation. Use the prepared spray mixture immediately and do not allow to stand overnight. **MAKHROMECTIN** can be mixed with waters of different pH values encountered normally in agricultural situations. Optimum pH values are between 5 – 9.

APPLICATION:

Ensure spray equipment is clean. Remove sediments, e.g residues of pesticides, rust and dust from spray tanks before adding **MAKHROMECTIN**. Avoid the use of hard or muddy water, or water with a high colloidal content derived from soils high in organic matter. Correctly calibrate all sprayers under field conditions prior to application. It is not necessary to spray to the point of run-off, but essential to ensure complete coverage of the target plants.
EVEN APPLICATION IS ESSENTIAL FOR GOOD RESULTS

Ground application:

MAKHROMECTIN can be applied with conventional ground equipment (tractor mounted booms, knapsack etc). Optimum spray deposits are obtained with ground equipment calibrated to spray 50 – 3000 l / ha with suitable nozzles to ensure adequate coverage. Where drift is a problem, do not exceed 2 Bar. Use only the pressures recommended for specific nozzles to avoid drift.

Aerial application (on cotton only)

Aerial application may only be done by a registered aerial application operator using a registered and correctly calibrated aircraft according to the instructions of SANS Code 10118 (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 / 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 / cm² must be recovered at the target. A droplet spectrum with a VMD of 250 – 280 micron is recommended. Ensure that the production of fine droplets, with a VMD less than 150 micron, is restricted to a minimum. The height of the spray boom should be maintained at between 3 and 4 m 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 / h.

General:

Ensure that fields are accurately marked and that the aerial spray operator exactly which fields to spray. Obtain an assurance from the aerial spray operator that the above requirements will be met. Prepared spray mixture must not be left in the spray tank for any length of time e.g overnight.

GENERAL APPLICATION DIRECTIONS:

Cotton:

Ground application: Apply up to 200 l of water / ha depending on the application equipment used **MAKHROMECTIN** has been shown not to have any detrimental effect on lint quality.
“tramline” cotton: Apply to dryland cotton planted in tramlines using 50 – 100 liter spray mixture / ha depending on the plant size. Position at least 5 hollow-cone nozzles of suitable size over the tramlines. One nozzle must spray over the top of each row, one nozzle must spray between the rows and two nozzles must be positioned at a 45 degree angle upwards, mounted on drop-arms on the outside of each of the two rooms.

Tomatoes:

Use a fine spray at high pressure and apply to point of incipient run-off.

Apples and Pears:

Apply as a high volume, high pressure cover spray to point of incipient run-off or as a low volume application. Add 0,25 % by volume of a suitable light mineral oil in the diluted spray mixture. Thorough coverage is essential.

Strawberries:

Apply as a high volume , high pressure cover spray. Thorough coverage of the upper and lower sides of the leaves is required for the control of spider mites.

APPLICATION RATES:

CROP AND PEST	DOSAGE	APPLICATION DIRECTIONS
APPLES AND PEARS Red Spider Mite (<i>Tetranychus urticae</i>)	35 ml + 250 ml spray oil / 100 l water	Apply when mite populations reach the economic threshold (see below). If less than 2150 l spray mix / ha is applied, use a minimum of 750 ml MAKHROMECTIN / ha in sufficient water for thorough coverage
European Red Mite (<i>Panonychus ulmi</i>)	0,75 l -1,5 l / ha + 0,25 % spray oil	Never exceed 1,5 l / ha per application or 3,0 l per growing season of MAKHROMECTIN . Apples: Apply only to orchards where the IPM programme is not controlling mites.
COTTON Red Sider Mte (<i>Tetranychus urticae</i>)	300 – 600 ml / ha	MAKHROMECTIN can be used as a preventive or corrective control measure. Ensure thorough coverage of the plants. Repeat the application as required to keep the mite population below the economical threshold level.

	300 ml / 100 l water (3 – 6 ml / 100 m row)	Ground application: 100 – 200 l / ha depending on the plant size. Preventative or corrective treatments. Do not use less than 300 ml MAKHROMECTIN / ha. Use higher rate in case of emergency situation. Aerial: in 30 l / ha. Do not use less than 300 ml / ha. “Tamline application” Apply 50 – 100 l spray mixture / ha for dryland cotton depending on plant size. Do not use less than 3.0 ml MAKHROMECTIN / 100 m row
FLOWERS AND ORNAMENTALS (Not for home garden use) Red Spider Mite (<i>Tetranychus spp</i>)	40 ml / 100 l	MAKHROMECTIN is to be applied at first signs of infestation. Use a full cover spray to the point of run-off. When being applied as a full cover spray, do not use less than 560 ml MAKHROMECTIN / ha. Under no circumstances use more than 1500 ml MAKHROMECTIN / ha. For red Spider Mites, if necessary, application must be repeated every 7 days for control to be maintained.
STRAWBERRIES Red Spider Mites (<i>Tetranychus urticae</i>)	1,2 l / ha	Apply MAKHROMECTIN as a full cover high pressure spray not less than 500 l water when pest is noticed. Apply 2 sprays 7 – 10 days apart. Repeat if necessary. Ensure thorough coverage of the plants. DO NOT apply more than 4,8 l / ha of MAKHROMECTIN per growing season.
POTATOES Leafminer (<i>Liriomyza spp</i>)	500 ml + suitable mineral oil adjuvant at the recommended rate	Apply MAKHROMECTIN at the first signs of infestation as a high volume full cover application. When spraying young plants apply in at least 300 l water / ha. For bigger plants use at least 500 l water / ha. Apply at least 2 consecutive MAKHROMECTIN applications 7 days apart. Alternate MAKHROMECTIN with other registered products for the control of leafminer.
TOMATOES Red Spider Mites (<i>Tetranychus urticae</i>)	60 ml / 100 l water (300 – 1200 ml / ha)	Apply MAKHROMECTIN at first sign of infestation as a full cover high volume, high pressure spray to the point of run-off. Use up to 2000 l spray mixture / ha. If less than 500 l water / ha is applied on young plants, not less than 300 ml MAKHROMECTIN must be used in sufficient water to ensure full coverage of the plants. Never exceed more than 1200 ml MAKHROMECTIN / ha. Red Spider Mite – repeat if necessary American leafminer – repeat at 7 day intervals to maintain control.
CITRUS Thrips (<i>Schirtothrips aurantii</i>)	20 ml + 300 ml light mineral oil / 100 l water	Apply at 100 % petal fall and repeat application 3 – 5 weeks later.

ECONOMIC THRESHOLD VALUES: (Red Spider Mites)

APPLES:

2 females / leaf up to end of March and thereafter 1 female / leaf

PEARS:

1 female / leaf throughout the season

COTTON:

Weeks after germination	3-10	12	14	16	18	20
Spider mite population index	0,5	0,8	1,1	1,4	1,7	2,0

WAARSKUWINGS:

Laat die volgende aantal dae toe tussen toedineing en oes van die gewas:

Appels.....	14 dae
Sitrus.....	3 dae
Katoen.....	21 dae
Pere.....	7 dae
Aarbeie.....	3 dae
Tamaties.....	3 dae

- Hanteer uiters versigtig
- Stoor agter slot en grendel
- Moet nie diere toelaat om van die bespuite blare te eet nie
- Moet nie gebruik in boorde wat ingeplant is met ander gewasse nie
- Moet nbie die bespuite gebied binne gaan sonder berkermende oorklere voor die bespuite oppervlaktes droog is nie
- Werkers sonder beskermende oorklere moet die gebied verlaat tydens bespuiting
- Giftig indien ingeneem of deur die vel ge-absorbeer word
- Voorkom kontak met vel of oë aangesien product oor-en velirritasie kan veroorsaak
- Bewaar weg van voedsel, voer, kunsmis en ander chemikalieë
- Hou buite bereik van kinders, oningeligte persone en diere
- Giftig vir viss4e en diere
- Giftig vir bye indien hulle in direkte kontak met die spuitstof kom – moet nie sput tydens periodes wanneer bye aktief is
- **Vlambaar:** Moet nie MAKHROMECTIN naby oop vlamme of hitte hanteer nie
- In die geval van vergifting ontbied ‘n geneesheer en toon hierdie etiket aan haar / hom
- **Lugtoediening:** Stel alle inwonders in die onmiddellike omgewing wat bespuit gaan word in kenis en reik die nodige waarskuwings uit. Moet nie oor water of aangrensende gebiede sput of die spuitstof toelaat om dit te besoedel nie
- Moet nie boorde per lugtoediening sput 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 aangesien die werking en effek daarvan beïnvloed kan word deur faktore soos abnormale klimaats - en beringstoestande; kwaliteit van verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui is nie en die voorkoms van weerstand van die insek teen die betrokke middel, sowel as die metode, tyd enakkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei, die omgewing, of vir nadelige effek op mens of dier of vir ‘n gebrek aan prestasie van die betrokke middel as gevolg van die 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 eet, drink of rook terwyl die produk hanteer word nie
- Vermy besoedeling van voedsel, voer, drinkwater en eetgerei
- Dra oogbeskerming, gesigmaskers, rubberhandskoene en oorpak wanneer die konsentraat hanteer word.
- Dra rubberhandskoene en beskermende oorpak met bespuiting
- Trek gekontamineerde klere uit en was dit daagliks na gebruik
- Moet nbie spuitnewel inasem nie
- Vermy vel en oog kontak met die spuitstof
- Vermy oorwaai van spuitnewel na ander gewasse, wieding, riviere, damme en gebiede wat nie onder behandeling is nie.
- Maak spuittoerusting deeglik skoon na gebruik en gooi waswater waar dit nie gewasse, wieding, riviere of damme sal besoedel nie
- Was uself na bespuiting
- Bere in 'n koel, droë plek weg van sonlig
- Spoel die houer driekeer uit met 'n volume water gelykstaande aan 'n minimum van 10 % van die houer
- Gooi die spoelwater by die inhoud van die spuittenk. Vernietig die houer deur gate daarin te slaan en dit plat te slaan en moet dit vir geen ander doel gebruik nie.

Simptome van Vergiftiging:

Moontlike simptome van vergiftiging is die vernouing van die oogpupille, stadige asemhaling en verdowing. Meer ernstige vergiftiging simptome vertoon spiersametrekkings en spiertrekkings

Eerstehulp aanbevelings:

Inaseming:

Beweeg die pasient weg van die besoedelde gebied na 'n goed geventileerde gebied wat nie besoedeld is nie. Dien artifisiele asemhaling toe of gee hart massering. Sorg dat die lugwee te alle tye oop is

Inname:

Kry mediese hulp onmiddellik

Vel:

Verwyder besoedelde klere en was die gekontamineerde area met genoegsame hoeveelheid skoon water. Moet nie die vel hard skuur nie.

Oë:

Spoel deeglik uit met skoon water vir ten minste 15 minute

VERKRY HULP IN ALLE MEDIÉSE GEVALLE

Nota aan die dokter:

Teenmiddel: Emetriën stroop of Ephedrien mag geneem word. Moet nie met middels behandel wat die aktiwiteit van "GABA" verhoog nie, soos bv Barbital of proyniel valenic suur in noodsituasies nie

GEBRUIKSAANWYSINGS:

Gebruik slegs soos aangedui

- Gebruik slegs skoon water vir spuitmengsel
- Maak altyd seker dat spuitapparaat skoon, vry van afsaksels, ens is en korrek gekalibreer is voordat bespuit word
- MAKHROMECTIN is effektiel vir die beer van die volwasse en onvolwasse stadium van die Rooispinnekop, Blaaspootjies en Amerikaanse bladmyner
- Deeglike en eweredige spuit dekking van die gewas is nodig
- MAKHROMECTIN word vinnig deur die plantweefsel geabsorbeer
- 'n Verlies van aktiewemateriaal mag voorkom deur afloop van die spuitmengsel van die blaar oppervlaktes af
- MAKHROMECTIN kan 'n korrektiewe of voorkomende bespuiting in katoen en tamaties gebruik word vir die beer van Rooispinmyte
- MAKHROMECTIN het die minimum invloed op die natuurlike vyande van myte, blaaspootjies en Amerikaanse bladmyner
- Op Appels en Pere is MAKHROMECTIN die ideale produk vir die gebruik in die GPA program sowel as in situasies waar rooispinmyte nie voldoende deur hulle natuurlike vyande beheer word nie.

MAKHROMECTIN is as 'n reël 'n stadig werkende doder en alhoewel myte en bladmyners geimobiliseerd word na blootstelling, word 3-5 dae benodig afhangende van die heersende temperatuur om volle mortaliteit te lewer. Gedurende hierdie periode is voeding en skade wat deur die plaag aangerig kan word minimaal.

WEERSTANDSTRATEGIE:

Weens die feit dat daar altyd 'n moontlikheid bestaan dat weerstand teen die produk ontwikkel kan word deur die plaag, word dit aanbeveel dat MAKHROMECTIN altyd in 'n effektiel weerstandsbeheer program gebruik sal word. So 'n program sal insluit middels met verskillende metodes van werking en wat afkomstig is van verskillende insekdoder groepe. Toedienings moet altyd gebasbeer wees op verkennings resultate.

Moet nie meer as:

- 3 bespuitings per seisoen van MAKHROMECTIN op katoen toedien nie
- 4 bespuitings van die laagste aanbevole dosis op Appels en Pere per seisoen spuit nie,
- 2 bespuitings per seisoen op Sitrus toedien nie,
- 4 bespuitings per seisoen op Aarbeie toedien nie,
- 5 bespuitings per seisoen op tamaties,
- 4 bespuitings per seisoen op blaaragtige gewasse nie en
- 4 bespuitings per seisoen op meerjarige gewasse

MENGBAARHEID:

MAKHROMECTIN mag met molassa gemeng word vir lugbespuiting op katoen Indien dit met piretroïëdes op katoen gemeng word, moet die laagste dosis van die piretroïëde gebruik word. MAKHROMECTIN mag met goedgekeurde ligte mineral eolies gemeng word op appels, pere en sitrus. MAKHROMECTIN benodig geen addisionele benatter / kleefmiddel nie. Aangesien nie alle volgorde en kombinasies van middels met MAKHROMECTIN getoes is nie, word dit aanbeveel om nie sommer MAKHROMECTIN in 'n tenkmengsel te gebruik nie. Kontak die naaste verspreider vir die nuutste inligting aangaande die mengsel

Menginstruksies:

Meet uit die verlangde hoeveelheid MAKHROMECTIN en meng dit vooraf in 10 liters water. Maak die sputtenk halfvol met skoon ater. Voeg die korrekte hoeveelheid voorafgemengde AGROMECTIN by. Indien 'n ander produk gemeng moet word met MAKHROMECTIN soos bv. Ligte minerale olies, moet dit ook eers vooraf vermeng word soos reeds beskryf. Maak die tenk met skoon water vol tot by die verlangde volume. Verseker deeglike roering en vermenging terwyl die mengsel bygevoeg word. Aanhoudende roering moet voor en gedurende bespuiting plaasvind. Gebruik die aangemaakte sputvloeistof dadelik en moet nie oor-nag gelaat word nie. MAKHROMECTIN kan met waters van verskillende pH's gemeng word soos normaalweg aangetref wrd in die landbou. Optimale pH waarde is tussen 5 en 9.

Toediening:

Maak altyd seker dat sputtoerusting skoon en vry van plaaggoderneerslae, roesplekke en stof is voordat MAKHROMECTIN bygevoeg word. Verwyder aanpaksels bv restes van benatbare poeiers in sputtenks voor gebruik. Voorkom die gebruik van modderige of brak water met 'n hoë kolloidale-inhou wat afkomstig is van grond met 'n hoë organiese materiaalinhou. Sputtoerusting moet akkuraat onder veldtoestande gekalibreer word voor toediening. Dit is nie nodig om MAKHROMECTIN toe te dien tot die punt van afloop nie meer terwyl 'n egalige eweredige plantbedekking is noodsaaklik. EGALIGE TOEDIENING IS NOODSAAKLIK VIR GOEIE RESULTATE.

Grondtoediening:

MAKHROMECTIN kan deur middel van konvensionele grondspuittoerusting (trekker gemonteerde balke, rugsakspuit) toegedien word. Grondspuittoerusting met gesikte spuitpunte wat 'n bespuitingsvolume van 50 – 3000 ℥ / ha gee, word aanbeveel vir optimale bedekking. Waar spuitstofwegdrywing 'n probleem is moet die druk nie 2 bar oorskry nie. Om spuitstofwegdrywing te voorkom moet teen 'n druk soos aanbeveel vir 'n spesifieke spuitpunt, gespuit word.

Lugtoediening: (slegs op katoen)

Lugtoediening mag slegs deur 'n geregistreerde lugbespuitingsoperator met 'n geregistreerde en korrek gekalibreerde vliegtuig volgens instruksies van SANS Kode 10118 ("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 die minimum beperk word. Die volgende kriteria moet nagekom word:

Toerusting:

- Gebruik gesikte 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 veseker
- 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 in die vlerkvorteks in te beperk

Toedieningsvereistes:

- 'n Minimum vlume van 30 ℥ spuitmengsel / 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 / cm² 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 kleinder as 150 mikron is, tot 'n minimum beperk word
- Die hoogte van die sputtbalk moet tussen 3 en 4 m bo die teiken gehandhaal word
- Moet nie sput 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 verminder sal word

Meteorologiese toestande:

- Die verskil tussen die nat- en droëbollesing, soos met 'n swaaihigrometer bepaal, moet nie 8 °C oorskry nie.
- Moenie toedien tydens turbulente en onstabiele weerstoestande of gedurende die hitte van die dag wanneer stygende en dalende konveksie windbeweging plaasvind nie
- Moenie toedien onder temperatuur inversie toestande (deur bo of binne die inversielaaq te sput) nie
- Moenie sput indien die windspoed 15 km / u oorskry nie

Algemeen:

- Verseker dat die lande akkuraat gemerk is en dat die sputoperator presies weet watter lande gespuit moet word
- Verkry versekering van die sputoperator dat aan bogenoemde vereistes voldoen sal word
- Aangemaakte sputoplossing moenie onnodig oorstaan nie, veral nie oornag nie

ALGEMENE TOEDIENINGAANWYSINGS:

Katoen:

Grondtoediening: Gebruik tenminste 200 ℓ water / ha afhangende van die toerusting wat gebruik word. MAKHROMECTIN het getoon dat dit geen nadelige invloed uitoeft op die katoenlint kwaliteit nie.

Treinspoorrye: Gebruik 50 – 100 liter sputmengsel per ha op droë land katoen afhangede van die plantgroottes. Gebruik tenminste 5 holkeëlspuitpunte van toepaslike groottes oor die treinspoorrye. Een sputtpunt moet bo-oor elke ry sput, een tussen die twee rye en twee sputtpunte moet teen 'n hoek van 45 grade aan die buitekant van die twee rye op hanarms gemonteer wees en opwaarts sput.

Tamaties:

Gebruik 'n hoë druk met fyn mis sputdruppels tot by die punt van afloop

Appels en pere:

Dien toe as 'n hoë druk, hoë volume bespuiting tot by punt van afloop of as 'n lae volume bespuiting. Voeg 25 % van 'n aanvaarbare ligte minerale olie by die sputmengsel. Deeglike bedekking is noodsaaklik.

Aarbeie:

Dien toe as 'n hoë volume, hoë druk volledige dekbespuiting. Deeglike bedekking van die boonste en onderste blaaroppervlaktes is nodig om die Rooispinmyte doeltreffend te beheer.

TOEDIENINGSHOEVEELHEDE:

GEWAS EN PLAAG	DOSIS	TOEDIENINGS-AANBEVELINGS
APPELS EN PERE Rooispinmyte (<i>Tetranychus urticae</i>)	35 ml + 250 ml Spuit olie / 100 ℥ water	<p>Spuit sodra die rooimyt populasie die ekonomiese drumpel waarde bereik (seien onder) Indien minder as 2150 ℥ / ha spuitmengsel toegedien word, gebruik 'n minimum van 750 ml MAKHROMECTIN / ha in genoegsame hoeveelheid water om volledige bedekking te verseker. MOET NOOIT meer as 1,5 ℥ / ha per bespuiting of meer as 3,0 ℥ / ha per groeiseisoen MAKHROMECTIN gebruik nie.</p>
Europese rooimyt (<i>Panonychus ulmi</i>)	0,75 – 1,5 ℥ / ha + 0,25 % spuitolie	<p>750 ml MAKHROMECTIN / ha in genoegsame hoeveelheid water om volledige bedekking te verseker. MOET NOOIT mee as 1,5 ℥ / ha per berspuiting of meer as 3,0 ℥ / ha per groeiseisoen MAKHROMECTIN gebruik nie.</p> <p>Appels: Dien toe slegs op boorde waar die GPB program nie doeltreffende myt beheer handhaaf nie.</p>
KATOEN Rooimyte (<i>Tetranychus urticae</i>)	300 – 600 ml / ha	<p>MAKHROMECTIN kan gebruik word vir voorkomende of korrektiewe beheer. Verseker volledige bedekking van die plant. Herhaal die toedienings indien nodig om die myt populasie onder die ekonomiese vlak.</p> <p>Grondtoediening: in 100 – 200 ℥ / ha afhangende van die plant groottes kan voorkomend van die plant groottes kan voorkomend of korrektief gebruik word. Moet nooit minder as 300 ml MAKHROMECTIN / ha gebruik nie. Gebruik die hoër dosis in noodsituasies.</p> <p>Lugtoediening: in 30 ℥ / ha, minder as 300 ml MAKHROMECTIN / ha gebruik nie te hou.</p> <p>Treinspoor-rye: Gebruik 50 – 100 ℥ spuitmengsel per ha vir droë land katoen. Moet nooit minder as 3,0 ml MAKHROMECTIN / 100 m ry gebruik nie.</p> <p>Korrektiewe beheer maatreëls: Spuit 300 ml MAKHROMECTIN / ha sodra die ekonomiese drempelvlakte bereik word volgens weeklikse verkennings tellings.</p>

		NOODBEHEER: Spuit MAKHROMECTIN teen 600 ml / ha gedurende toestande wat gunstig is vir myt populasie vermeerdering of by 'n hewige infestasie.
BLOMME EN SIERPLANTE (nie vir huistuin gebruik nie) Rooispinmyte (<i>Tetranychus spp</i>)	40 ml / 100 ℥ water	MAKHROMECTIN moet by die eerste teken van infestasie sestuit word. Volle dekbespuiting tot by die punt van afloop. Minder as 560 ml MAKHROMECTIN / ha moet nooit gebruik word nie. Moenie meer as 1500 ml MAKHROMECTIN / ha gebruik nie. Vir rooispinmyt toedienings moet elke 7 dae, soos nodig, herhaal word om beheer te verseker.
AARBEIE Rooispinmyte (<i>Tetranychus urticae</i>)	1,2 ℥ / ha	Dien MAKHROMECTIN in nie minder as 500 ℥ water / ha toe as 'n hoë druk- en volle dektoediening. Dien twee bespuitings tot 7 – 10 dae verwijder van mekaar. Herhaal indien nodig om die plaag te beheer. Verseker bedekking van die plante. Moet nie meer as 4,8 ℥ MAKHROMECTIN per ha per seisoen toedien nie.
AARTAPPELS Blaarmynner (<i>Liriomyza spp</i>)	500 ml + minerale olie benatter by die aanbevole dosis	Dien MAKHROMECTIN toe met die eerste tekens van 'n infestasie teen 'n hoë volume volle dektoediening. Wanneer klein plante bespuit word gebruik 300 ℥ water / ha en as ouer plante bespuit word gebruik tenminste 500 ℥ water / ha. Dien twee agtereenvolgende MAKHROMECTIN bespuitings toe 7 dae uitmekaar. Wissel MAKHROMECTIN af met ander geregistreerde produkte vir die beer van Blaarmynner.
TAMATIES Rooispinmyte (<i>Tetranychus urticae</i>)	60 ml / 100 ℥ water (300 – 1200 ml / ha)	Spuit MAKHROMECTIN as 'n hoëvolume en druk bespuiting sodra die plaag waargeneem word. Spuit tot by die punt van afloop. Tot 2000 ℥ spuitmengsel / ha kan toegedien word. Indien minder as 500 ℥ wate / ha toegedien word, moet gesorg word dat nooit minder as 300 ml MAKHROMECTIN / ha toegedien word nie. Genoeg water volume moet toegedien word om volle bedekking te verseker. MOET NOOIT meer as 1,2 ℥ MAKHROMECTIN / ha / groeiseisoen toedien nie. Rooispinmyte: Herhaal bespuiting indien nodig.
SITRUS Blaaspootjie (<i>Scirtothrips aurantii</i>)	20 ml + 300 ml ligte minerale olie / 100 ℥ water	Dien toe tydens 100 % blomblaar val. Herhaal toediening 3 – 5 weke later

EKONOMIESE DREMPELVLAKKE (Rooispinmyte)

Appels:

2 wyfies / blaar tot einde Maart en daarna 1 wyfie / blaar

Pere:

1 wyfie / blaar deur die hele seisoen

Katoen:

Weke na ontkieming	3-10	12	14	16	18	20
Rooispinmyt populasie index waarde	0,5	0,8	1,1	1,4	1,7	2,0