

FORTRESS ULTRA

DIRECTIONS FOR USE ENCLOSED
Batch Number
Date of manufacture

REFER TO DETAILS AS PRINTED
ON CONTAINER / BAG

GEBRUIKSAANWYSINGS INGESLUIT
Lotnommer
Datum van vervaardiging

VERWYS NA BESONDERHEDE
SOOS OP HOUER / SAK GEDRUK

BEFORE USING THIS PRODUCT, READ THE LABEL CAREFULLY

FORTRESS ULTRA

FUNGICIDE


Reg. No. L10450, Act/Wet No. 36 of/van 1947
Nambian Reg. No. N-AR 2182

A suspension concentrate, systemic, translaminar and contact fungicide for the preventative control of the diseases in crops as listed.

1: 16/05/2018

'n Suspensiekonsentraat, sistemiese, translaminêre- en kontakswamdoder vir die beheer van siektes op gewasse soos aangedui.

FRAC FUNGICIDE GROUP CODE	11&3	FRAC SWAMDODER GROEPKODE
ACTIVE INGREDIENTS / AKTIEWE BESTANDELE		
Azoxystrobin (strobilurin)	200 g/ℓ	Asoksistrobien (strobilurien)
Difenoconazole (triazole)	125 g/ℓ	Difenokonasool (triasool)

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

5ℓ



UN Number: 3082



CAUTION / VERSIGTIG



WARNINGS

Withholding periods

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

Groundnuts.....	28 days
Potatoes.....	14 days
Tomatoes.....	7 days

IMPORTANT: The recommended withholding period between last application and harvest meets local residue requirements, but may not meet export requirements.

- Harmful if swallowed or inhaled.
- Toxic to fish, harmful to other aquatic life. May cause long-term adverse effects in aquatic environments.
- Avoid contact with skin or eyes as product may cause eye and skin irritation as well as skin sensitisation.
- Store under lock-and-key in a cool, dry place away from food, feed and fertilisers.
- Store away from food, feed and seed.
- Keep away from children, uninformed persons and animals.
- **Re-entry:** Do not enter treated area until spray deposit has dried unless wearing protective clothing.
- **Aerial application:** Notify all the inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings. Do not spray over or allow the drift to contaminate water or adjacent areas.

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 the application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for lack of performance of the remedy concerned due to failure of the user to follow the label instructions or to the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

PRECAUTIONS

- Avoid contact with eyes, skin and inhalation of fumes and spray mist as product may cause eye and skin irritation.
- Wear protective clothing (e.g. rubber gloves) and face shield when preparing the spray mixture and during spraying.
- In case of direct contact with skin, wash immediately with soap and water.
- In case of direct eye contact, rinse for at least 15 minutes with clean water, remove contact lenses if present.
- Wash contaminated clothing daily, wash yourself.
- Do not eat, drink or smoke while preparing or applying the spray mix or before washing face and hands.
- Avoid drift of spray mist onto other crops, grazing, rivers, dams and other areas not under treatment.
- Clean equipment before and after use. Dispose of wash water where it will not contaminate crops, pastures, rivers, dams or other water sources.
- Invert the empty container over the spray tank and allow to drain for at least 30 seconds after the flow has slowed to a drip. Rinse the empty container three times with a volume of water equal to a minimum of 10 % of that of the container. Add rinsings to the contents of the spray tank before destroying the container in the prescribed manner.
- Destroy empty containers by perforating and flattening before burning or burying in a safe way and do not use for any other purpose.
- Prevent contamination of food, feed, drinking water and eating utensils.
- Do not apply **FORTRESS ULTRA** to any crop or situation not mentioned in this label.
- Do not apply this product in combination or tank mixture with any other product or agricultural

remedy which is not specifically listed on this label. Meridian Agrochemical Company (Pty) Ltd accepts no responsibility for any negative effects experienced if the instructions on this label are not adhered to, unless a Meridian representative was consulted beforehand.

- If **FORTRESS ULTRA** is used in a tank mix with other recommended products, consideration should be given to the restrictions of those respective products.

DIRECTIONS FOR USE

Use only as directed.

MODE OF ACTION

FORTRESS ULTRA is a suspension concentrate formulation with protectant, curative, translaminar and systemic properties for the control of economically important diseases. **FORTRESS ULTRA** contains azoxystrobin, a fungicide of the chemical class strobilurins and is a Quinone outside inhibitor fungicide. The biochemical mode of action of azoxystrobin is mitochondrial respiration inhibition by obstruction of electron transfer in the mitochondria of the cell between cytochrome b and cytochrome C₁ at the ubiquinol oxidising site. On the plant surface, the primary biological mode of action is the inhibition of spore germination and mycelia growth and also shows antispore activity.

FORTRESS ULTRA also contains difenoconazole. Difenoconazole is a systemic fungicide, from the triazole chemical class, which is absorbed by the leaves and has acropetal and strong translaminar translocation. The biochemical mode of action of difenoconazole is the inhibition of sterol demethylation. This then inhibits cell membrane ergosterol biosynthesis and stops fungal development.

RESISTANCE MANAGEMENT

For resistance management, **FORTRESS ULTRA** is a group code 11 and 3 fungicide. Any fungus population may contain individuals naturally resistant to **FORTRESS ULTRA** and other group code 11 and 3 fungicides. The resistant individuals can eventually dominate the disease population if these fungicides are used repeatedly. These resistant fungi may not be controlled by **FORTRESS ULTRA** or any other group code 11 and 3 fungicide.

To delay fungicide resistance:

- Avoid exclusive repeated use of fungicides from the same fungicide group code. Alternate or tank mix with registered products from different fungicide group codes.
- Refer to individual product labels when alternating products or when using tank mixtures with registered products.
- A spray programme of mixtures or alternations with remedies with a different mode of action may delay resistant strain build-up.
- Integrate other control methods (chemical, cultural, biological) into disease control programmes.

Since the occurrence of resistance cannot be forecast, users are advised to keep treated crops under close observation. If treatment is not effective following the use of **FORTRESS ULTRA** as recommended, a resistant strain may be present. If a resistant strain is positively identified, consideration should be given to prompt use of a fungicide with a different mode of action, for which there is no record of resistance to the relevant disease. Meridian Agrochemical Company (Pty) Ltd will not accept any liability for performance failures in the event of a build-up of disease resistance resulting from inadequate resistance management practices as indicated on the label. For specific information on resistance management, contact the registration holder of this product or visit the FRAC website <http://www.frac.info/frac/index.html>.

USE RESTRICTIONS

- **FORTRESS ULTRA** should always be applied preventively as described under recommendations.
- **FORTRESS ULTRA** must be applied as a full cover spray.
- Do not reduce the dosage rates below that recommended on the label.
- Never use **FORTRESS ULTRA** as a corrective or curative treatment or after the unsuccessful application of any product.
- When tank mixing or alternating with other fungicides, use registered mixing partners that provide satisfactory disease control when applied alone at the mixing rate.

MIXING INSTRUCTIONS

Half fill the spray tank with clean water. Add the recommended amount of **FORTRESS ULTRA** to the spray water in the tank while agitation is continued and fill to the top with water. **After the spray tank is filled and during the spraying, the mixture should be constantly agitated until the spray tank is empty.** If spraying is interrupted, the spray mixture in the tank should be agitated properly before spraying is commenced.

If **FORTRESS ULTRA** needs to be used in tank mix combinations, full cognisance must be taken of all warnings, precautions and directions for use on that particular product's label.

First, mix small quantities of the products separately with water. Check for any signs of incompatibility such as flocculation etc. It is recommended to add **FORTRESS ULTRA** first and the mixing partner second while agitating. If mixing partners are packed in water-soluble bags, add the soluble bags first and then **FORTRESS ULTRA**. Ensure constant agitation. **Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank overnight.**

COMPATIBILITY

The compatibility of **FORTRESS ULTRA** 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. Meridian Agrochemical Company (Pty) Ltd cannot be held responsible for damage to crops resulting from tank mixtures with products or formulations not tested.

APPLICATION INSTRUCTIONS

Make sure that the applicator being used is properly calibrated and in good working condition. Ensure good coverage of crops by using the spray volumes as indicated in the relevant tables. Do not let the spray overlap as this can lead to crop damage. Ensure that the spray volume is applied uniformly throughout the targeted area.

AERIAL APPLICATION

Avoid chemical drift at all times.

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 60-75% of the wingspan to prevent droplets from entering the wingtip vortices.

Application Parameters

- A minimum volume of 30-40 l spray mixture per ha is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy nor be held responsible for any adverse effects if this product is applied aurally at a lower volume rate than recommended.
- A droplet coverage of 25 – 35 droplets per square cm must be recovered at the target.
- A droplet spectrum with a VMD of 280 – 300 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.

Meteorological Conditions

- The difference between the wet and dry bulb readings, as determined using a whirling hygrometer, must not exceed 8 °C.
- Do not spray under turbulent, unstable conditions or during the heat of the day when rising thermals and draughts occur.
- Do not spray under temperature inversion conditions (spraying in or above the inversion layer) and/or high humidity conditions as this may cause:
 - i. Reduced efficacy due to suspension and evaporation of small droplets in the air (Which leads to inadequate coverage).
 - ii. Damage to other sensitive crops and/or non-target areas through drifting of the spray cloud away from the targeted area.
- Do not spray when the wind speed exceeds 15 km per hour.
- Under the following climatic conditions drift could occur more than 3 to 5 km.
 - i. Cloudy weather with relative humidity above 80% and low air movement of less than 5 km per hour. When such conditions prevail, aerial application should **NOT** be carried out where sensitive crops, crop seedlings or deciduous fruit trees e.g. apples in budding or early development stages are present within 5 km of the nearest spray path cloud away from the target field.

General

- Ensure that fields are accurately marked and that the aerial spray operator knows exactly which fields to spray. Indicate adjacent environmentally sensitive areas or sensitive neighbouring crops, beehives or water sources that could be affected by the pesticide.
- Obtain an assurance from the aerial spray operator that the above requirements will be met, and that the relevant data will be compiled in a logbook and kept for future reference.

Influence of rain on application:

Should it rain within three hours after application, the application must be repeated.

RECOMMENDATIONS

CROP & DISEASE	DOSAGE RATE	REMARKS
GROUNDNUTS Early leaf spot (<i>Cercospora arachidicola</i>)	Ground application 500 ml / ha	Apply two (2) consecutive sprays at 14 - 21-day intervals starting at first signs of disease, or at flower initiation (10 – 12 weeks after planting) if no disease is present. Do not exceed two (2) applications of FORTRESS ULTRA per season. Tractor application: 300 – 400 l water / ha.
POTATOES Early blight (<i>Alternaria solani</i>)	Ground and aerial application 375 ml / ha	Apply in blocks of two (2) consecutive sprays 7 – 10 days apart when the weather favours the disease. Alternatively, applications can be repeated at 14-day intervals, provided that these applications are alternated every 7 days with other products registered for early blight control. FORTRESS ULTRA alternated with SOLSAN SC or VALEO 500 SC at their registered application rates in a 7-day cycle will also control late blight (<i>Phytophthora infestans</i>) preventatively. Due to reduced efficacy, aerial application is only recommended when prevailing conditions preclude application by tractor. Do not exceed six (6) applications of FORTRESS ULTRA per season.

		Tractor application: 250 - 750 ℓ water / ha. Aerial application: 30 – 40 ℓ water / ha.
TOMATOES Early blight <i>(Alternaria solani)</i>	Ground application 100 mℓ / 100 ℓ water	Apply in blocks of two (2) consecutive sprays 7 – 10 days apart when the weather favours the disease. Alternatively, applications can be repeated at 14-day intervals, provided that these applications are alternated every 7 days with other products registered for early blight control. FORTRESS ULTRA alternated with SOLSAN SC or VALEO 500 SC in a 7-day cycle will also control late blight (<i>Phytophthora infestans</i>) preventatively. Do not exceed six (6) applications of FORTRESS ULTRA, or six (6) applications of products containing azoxystrobin, or six (6) applications of products containing difenoconazole per season. Tractor application: 500 – 1400 ℓ water / ha.

ACKNOWLEDGEMENT OF TRADEMARKS

Solsan SC (L 9590)
Valeo 500 SC (L 9086)

Meridian Agrochemical Company (Pty) Ltd
Meridian Agrochemical Company (Pty) Ltd

WAARSKUWINGS

Onthoudingsperiodes

Laat die volgende aantal dae toe tussen laaste toediening en oes:

Grondbone.....	28 dae
Aartappels.....	14 dae
Tamaties.....	7 dae

BELANGRIK: Die voorgestelde onthoudingsperiodes tussen laaste toediening en oes voldoen aan plaaslike vereistes, maar mag moontlik nie aan uitvoervereistes voldoen nie.

- Skadelik indien ingesluk of ingeasem.
- Giftig vir visse, en skadelik vir ander waterorganismes. Mag langtermyn nadelige effek op waterbronne veroorsaak.
- Vermoë kontak met die vel of oë aangesien die produk oog- en velirritasie mag veroorsaak, asook velsensitiserings.
- Bêre agter slot-en-grendel in 'n koel, droë plek weg van voedsel, voer en kunsmis.
- Bêre weg van voedsel, voer en saad.
- Hou buite bereik van kinders, oningelike persone en diere.
- **Herbetreding:** Moet nie behandelde gebiede betree alvorens die spuitneerslag droog is nie, tensy beskermende klere gedra word.
- **Lugtoediening:** Stel al die inwoners in die onmiddellike omgewing van die gebied wat bespuit gaan word in kennis en reik die nodige waarskuwings uit. Moenie oor aangrensende gebiede of water spuit nie of toelaat dat die spuitnewel daarheen oorwaai nie.

Alhoewel hierdie middel omvattend onder 'n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie. Die werking en doeltreffendheid daarvan kan beïnvloed word deur faktore soos abnormale grond-, klimaats- en bergingstoestande; kwaliteit van verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui word nie en die voorkoms van weerstand van die siektes teen die betrokke middel, sowel as die metode, tyd en akkuraatheid van die toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei, die omgewing of vir nadelige invloede 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

- Vermoë kontak met oë en vel asook die inaseming van dampe of spuitnewel aangesien hierdie produk oog- en velirritasie kan veroorsaak.
- Dra beskermende klere (bv. rubber handskoene) en gesigskerm wanneer die spuitmengsel vermeng word en tydens toediening.
- In die geval van direkte kontak met die vel, was dadelik met seep en water.
- In die geval van direkte oogkontak, spoel vir ten minste 15 minute met skoon water uit en verwyder kontakklense indien teenwoordig.
- Was besoedelde klere daaglik en was jouself.
- Moet nie eet, drink of rook tydens toediening of vermenging nie, of voordat gesig en hande gewas is nie.
- Vermoë wegdrywing van spuitnewel na ander gewasse, weiding, riviere, damme en ander areas wat nie onder behandeling is nie.
- Maak die toerusting voor en na gebruik skoon. Raak van waswater ontslae waar dit nie gewasse, weidings, riviere, damme of enige ander waterbronne sal besoedel nie.
- Keer die leë houer om oor die spuittenk en dreineer vir minstens 30 sekondes nadat die vloeitot 'n drup verminder het. Spoel die leë houer **drie keer** uit met 'n volume water gelykstaande aan 'n minimum van 10% van die inhoud van die houer. Gooi die spoelwater by die inhoud van die spuittenk voordat die houer op die voorgeskrewe wyse vernietig word.
- Vernietig leë houe deur gate daarin te maak en plat te slaan voordat dit op 'n veilige manier verbrand of begrawe word en vir geen ander doel aangewend word nie.

- Vermoed besoedeling van voedsel, voer, drinkwater en eetgerei.
- Moet nie **FORTRESS ULTRA** op enige gewas of situasie toedien wat nie op hierdie etiket verskyn nie.
- Moet nie hierdie produk in kombinasie of tenkmengsels toedien met enige ander produk of landboumiddel wat nie spesifiek op die etiket gelys is vir toediening nie. Meridian Agrochemical Company (Edms.) Bpk. aanvaar geen verantwoordelikheid vir enige negatiewe gevolge veroorsaak deurdat die instruksies op die etiket nie nagekom word nie, tensy 'n Meridian verteenwoordiger vooraf geraadpleeg is.
- Indien **FORTRESS ULTRA** met ander aanbevole produkte in tenkmengsels gebruik word, moet die gebruiksaanwysings van daardie betrokke produkte gevolg word.

GEBRUIKSAANWYSINGS

Gebruik slegs soos aangedui.

METODE VAN WERKING

FORTRESS ULTRA is 'n suspensiekonsentraat-formulering met beskermende, genesende, translaminêre en sistemiese eienskappe vir die beheer van ekonomies belangrike siektes. **FORTRESS ULTRA** bevat asoksistrobien, 'n swamdoder van die chemiese klas strobilurien en is 'n Kinoon buite-inhiberende swamdoder. Die biochemiese metode van werking van asoksistrobien is mitochondriale respirasie-inhibisie deur die obstruksie van elektronoordrag in die mitochondria van die sel tussen sitochroom b en sitochroom C1 by die ubiquinol oksiderende area. Op die plantoppervlak is die primêre biologiese metode van werking die inhibisie van spoorontkieming en miseliumgroei en toon ook anti-sporale werking.

FORTRESS ULTRA bevat ook difenokonasool. Difenokonasool is 'n sistemiese swamdoder van die triasool chemiese klas wat deur blare geabsorbeer word en akropetale en sterk translaminêre translokasie het. Die biochemiese metode van werking van difenokonasool is die inhibering van sterol-demetielasie. Dit inhibeer dan selmembraan ergosterol-biosintese en keer swamontwikkeling.

WEERSTANDBESTUUR

Vir weerstandsbestuur is **FORTRESS ULTRA** 'n groepkode 11 en 3 swamdoder. Enige swampopulasie mag individueel insluit wat 'n natuurlike weerstand teen **FORTRESS ULTRA** of enige ander groepkode 11 en 3 swamdoder het. Indien hierdie swamdoders herhaaldelik aangewend word, kan die weerstandbiedende individue uiteindelik die swampopulasie oorheers. Hierdie weerstandige swamme sal waarskynlik nie deur **FORTRESS ULTRA** of enige ander groepkode 11 en 3 swamdoder beheer word nie.

Om weerstand teen swamdoders te vertraag:

- Vermoed die eksklusiewe herhaaldelike gebruik van swamdoders met dieselfde groepkode. Wissel af met, of gebruik tenkmengsels van, geregistreerde produkte in verskillende swamdodergroepkodes.
- Sien toepaslike individuele produketikette wanneer middels afgewissel word of tenkmengsels met geregistreerde produkte gebruik word.
- 'n Suiwerprogram of tenkmengsels met middels met 'n ander metode van werking kan weerstandbiedendheid vertraag.
- Integreer ander beheermaatreëls (chemies, verbouing, biologies) in siektebeheerprogramme.

Aangesien die voorkoms van weerstandbiedendheid moeilik is om te bepaal, is dit uiters belangrik om die behandelde gewasse noukeurig te ondersoek. Indien die behandeling nie effektief is met die gebruik van **FORTRESS ULTRA** soos voorgeskryf nie, mag daar 'n weerstandbiedende-populasie (swamras) teenwoordig wees. Indien so 'n weerstandbiedende-populasie positief geïdentifiseer word, moet daar onmiddellik 'n swamdoderbespuiting wat 'n ander werkswyse het, waar daar geen bewys van weerstand teen die siekte voorkom, gedoen word. Meridian Agrochemical Company (Edms.) Bpk. sal geen verantwoordelikheid aanvaar vir enige gebrek aan prestasie in die geval van die opbou van siekteweerstand as gevolg van onvoldoende weerstandsbestuurspraktyke soos aangedui op die etiket nie. Vir spesifieke inligting oor weerstandsbestuur kan die registrasiehouer van hierdie produk gekontak word of die FRAC webwerf by <http://www.frac.info/frac/index.html> besoek word.

GEBRUIKSBEPERKINGS

- **FORTRESS ULTRA** moet altyd voorkomend aangewend word soos onder aanbevelings beskryf word.
- **FORTRESS ULTRA** moet as 'n volle dekbespuiting aangewend word.

- Moenie die aanbevole dosis op die etiket verminder nie.
- Moet nooit **FORTRESS ULTRA** as 'n korrektiewe of genesende behandeling aanwend nie, of toedien na 'n onsuksesvolle toediening van 'n ander middel.
- Indien tenkmengsels gebruik word, of afwisseling met ander swamdoders gedoen word, gebruik geregistreerde mengvennote wat bevredigende siektebeheer teen die voorgeskrewe dosis op sy eie sal gee.

MENGINSTRUKSIES

Maak die spuittenk halfvol met skoon water. Voeg die benodigde hoeveelheid **FORTRESS ULTRA** in die spuitwater in die tenk en maak die tenk vol met water tot by die verlangde volume terwyl aanhoudend geroer word. **Nadat die tenk gevul is en tydens toediening moet die mengsel voortdurend geroer word totdat die tenk leeg is.** Indien bespuiting onderbreek word, moet die spuitmengsel in die tenk deeglik geroer word voordat bespuiting hervat word.

Indien **FORTRESS ULTRA** in tenkmengsels met ander produkte gebruik word, moet aandag aan al die waarskuwings, voorsorgmaatreëls en gebruiksaanwysings op daardie spesifieke produk etiket gegee word.

Eerstens moet 'n klein hoeveelheid van die produkte apart met water gemeng word. Let op vir enige tekens van onverenigbaarheid soos flokkulasie ens. Dit is raadsaam om eers **FORTRESS ULTRA** en daarna die mengvennote in te gooi terwyl roering plaasvind. Indien mengvennote in wateroplosbare sakkies verpak is, moet die sakkies eerstens ingegooi word en dan die **FORTRESS ULTRA**. Verseker konstante roering. **Tenkmengsels moet onmiddellik uitgespuit word en nie toegelaat word om in die spuittenk oornag te staan nie.**

VERENIGBAARHEID

Die verenigbaarheid van **FORTRESS ULTRA** met ander produkte sal van die formulerings van die onderskeie produkte afhang, asook van die kwaliteit van die verdunningswater wat gebruik word. Soos formulerings van tyd tot tyd verander, is dit raadsaam om eers 'n fisiese verenigbaarheidstoets te doen, voordat tenkmengsels gemaak word. Meridian Agrochemical Company (Edms.) Bpk. kan nie verantwoordelik gehou word vir skade aan gewasse a.g.v. tenkmengsels met produkte of formulerings wat nie getoets is nie.

TOEDIENINGSINSTRUKSIES

Maak seker dat die spuittoerusting korrek gekalibreer is en in goeie werkende toestand is. Verseker goeie bedekking van gewasse deur die spuitvolumes in die onderskeie tabelle te gebruik. Moenie dat spuitneerslag oorvleuel nie, want dit kan tot gewasskade lei. Verseker dat die spuitvolume egalig en akkuraat oor die teikenarea gespuit word.

LUGTOEDIENING

Verhoed ten alle tye chemiese wegdrywing.

Lugtoediening mag slegs deur 'n geregistreerde lugbespuitingsoperateur met 'n korrek gekalibreerde, geregistreerde vliegtuig volgens die 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 'n minimum beperk word. Dit is dus belangrik om aan die volgende vereistes te voldoen:

Toerusting

- Gebruik geskikte atomiseringsapparaat wat die vereiste druppelgrootte en bedekking sal produseer, maar wat die minste verlies van produk deur wegdrywing sal verseker.
- Die operateur moet 'n spuitkopstelsel opstel wat 'n druppelspektrum met die kleinste moontlike relatiewe spanwydte sal produseer.
- Al die spuitkoppe en atomiseerders moet in die binneste 60 - 75% van die vlerkspan geplaas word om te verhoed dat die druppels binne-in die vlerkvorteks inbeweeg.

Toedieningsparameters

- 'n Minimum volume van 30-40 l spuitmengsel per hektaar word aanbeveel. Aangesien hierdie produk nie teen 'n verlaagde volume 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 25 - 35 druppels per vierkante cm moet op die teikenarea herwin word.
- 'n Druppelspektrum met 'n VMD van 280 - 300 mikron word aanbeveel. Verseker dat die produksie van fyn druppels (kleiner as 150 mikron) tot 'n minimum beperk word.
- Die hoogte van die spuitbalk moet tussen 3 en 4 meter bokant die teiken gehandhaaf word.
- Moet nie spuit wanneer die vliegtuig besig is om te klim, te draai, te duik, of terwyl dit uitklim nie.

Meteorologiese Toestande

- Die verskil tussen die nat- en droëbollesing, soos met 'n swaaihygrometer bepaal, moet nie 8°C oorskry nie.
- Moenie tydens turbulente, onstabiele toestande, of gedurende die hitte van die dag wanneer stygende en dalende konveksie-windbewegings plaasvind, toedien nie.
- Moenie tydens temperatuur-inversie-toestande (deur bokant of binne-in die inversielaag te spuit) en/of gedurende hoë humiditeitstoestande toedien nie, aangesien dit kan lei tot:
 - i. Verlaagde effektiwiteit a.g.v. suspensie of verdamping van klein druppels in die lug (wat tot onvoldoende bedekking op teikenarea lei).
 - ii. Skade aan ander sensitiewe gewasse en/of nie-teikenareas deur wegdrywing van die spuitwolk vanaf die teikenarea.
- Moet nie spuit wanneer die windspoed 15 km per uur oorskry nie.
- Onder die volgende klimatologiese toestande kan wegdrywing verder as 3 tot 5 km gevind word:
 - i. Bewolkte weer met relatiewe humiditeit bokant 80% en stadige lugbeweging van minder as 5 km per uur. Indien sulke toestande voorkom, moet lugbespuiting **NIE** plaasvind waar vatbare gewasse, gewassaailinge, of sagtevrugtebome soos appels in bot of in hul vroeë seisoen groeistadiums binne 5 km vanaf die naaste vliegtuigtoedieningstrook, teenwoordig is nie.

Algemeen

- Verseker dat die lande akkuraat gemerk is en dat die spuitoperator presies weet watter lande gespuit moet word. Dui aangrensende omgewingssensitiewe areas of sensitiewe aangrensende gewasse, byekorwe of waterbronne aan wat deur die plaagdoder beïnvloed kan word.
- Verkry die versekering van die spuitoperator dat aan die bogenoemde vereistes voldoen sal word en dat die toepaslike data in 'n logboek vir latere verwysing opgeteken sal word.

Die invloed van reën op die toediening:

Indien dit sou reën binne drie ure na toediening, moet die toediening herhaal word.

AANBEVELINGS

GEWAS EN SIEKTE	DOSIS	OPMERKINGS
GRONDBONE Vroeë blaarvlek <i>(Cercospora arachidicola)</i>	Grondtoediening 500 ml / ha	Dien twee (2) opeenvolgende bespuitings 14 - 21 dae uitmekaar toe sodra die eerste tekens van die siekte verskyn, of tydens blominsiasie (10 – 12 weke na plant) indien geen siekte teenwoordig is nie. Moenie meer as twee (2) FORTRESS ULTRA toedienings per seisoen maak nie. Trekkertoediening: 300 – 400 l water / ha.
AARTAPPELS Vroeë roes <i>(Alternaria solani)</i>	Grond- en lugtoediening 375 ml / ha	Dien toe in blokke van twee (2) opeenvolgende bespuitings 7 – 10 dae uitmekaar wanneer weerstoestande gunstig is vir siekteontwikkeling. Alternatiewelik kan toedienings met 14 dae intervalle toegedien word, mits hierdie bespuitings elke 7 dae met ander geregistreerde vroeë roes middels afgewissel word. FORTRESS ULTRA afgewissel met SOLSAN SC of VALEO 500 SC teen die geregistreerde dosis in 'n 7-

		dagsiklus sal ook laatroes (<i>Phytophthora infestans</i>) voorkomend beheer. As gevolg van verminderde effektiwiteit word lugtoediening slegs aanbeveel wanneer heersende toestande 'n trekkerbespuiting verhoed. Moenie ses (6) FORTRESS ULTRA toedienings per seisoen oorskry nie. Trekkertoediening: 250 - 750 l water / ha. Lugtoediening: 30 – 40 l water / ha.
TAMATIES Vroeë roes (<i>Alternaria solani</i>)	Grondtoediening 100 ml / 100 l water	Dien toe in blokke van twee (2) opeenvolgende bespuitings 7 – 10 dae uitmekaar wanneer weerstoestande gunstig is vir siekteontwikkeling. Alternatiewelik kan toedienings met 14 dae intervalle toegedien word, mits hierdie bespuitings elke 7 dae met ander geregistreerde vroeë roes middels afgewissel word. FORTRESS ULTRA afgewissel met SOLSAN SC of VALEO 500 SC teen die geregistreerde dosis in 'n 7-dagsiklus sal ook laatroes (<i>Phytophthora infestans</i>) voorkomend beheer. Moenie ses (6) FORTRESS ULTRA toedienings, of ses (6) toedienings met produkte wat asoksistrobien, of 6 (ses) toedienings met produkte wat difenokonasool bevat, per seisoen oorskry nie. Trekkertoediening: 500 – 1400 l water / ha.

ERKENNING VAN HANDELSNAME

Solsan SC (L 9590)
Valeo 500 SC (L 9086)

Meridian Agrochemical Company (Edms.) Bpk.
Meridian Agrochemical Company (Edms.) Bpk.