



# FORTRESS ELITE

BEFORE USING THIS PRODUCT, READ THE LABEL CAREFULLY

**FORTRESS ELITE**

**FUNGICIDE**

Reg. No. L10732, Act/Wet No. 36 of/van 1947  
Nambian Reg. No. N-AR 2183

1:02/10/2019

A broad-spectrum suspension concentrate fungicide with systemic, translaminar and contact properties for the preventative control of different leaf diseases in crops as listed.

'n Breëspektrum suspensiekonsentraat swamdoder met sistemiese-, translaminêre-, en kontakeienskappe vir die voorkomende beheer van verskeie blaarsiektes in gewasse soos gelys.

FRAC FUNGICIDE GROUP CODE	11 & M5	FRAC SWAMDODERGROEPKODE
<b>ACTIVE INGREDIENTS / AKTIEWE BESTANDDELE</b>		
Azoxystrobin (strobilurin)	60 g/l	Asoksistrobien (strobilurien)
Chlorothalonil (phthalimide)	600 g/l	Chlorotalonil (phthalimied)

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

DIRECTIONS FOR USE ENCLOSED  
REFER TO DETAILS AS PRINTED  
ON CONTAINER / BAG

Batch Number  
Date of manufacture

UN Number: 3082

**CAUTION / VERSIGTIG**

Meridian Agritech

## **WARNINGS**

### **Withholding periods**

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

Brassica.....	7 days
Carrots.....	1 day
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 and very toxic 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.
- Keep out of reach of children, uninformed persons and animals.
- **FORTRESS ELITE** has been tested on some of the most important commercial cultivars without any phytotoxic effects. More susceptible cultivars may be released in the future, which need to be tested; for this apply **FORTRESS ELITE** to a limited test area before commercial applications are made.
- **Re-entry:** Do not enter treated area until spray deposit has dried unless wearing protective clothing.

**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 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 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.
- 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 30 % 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 ELITE** 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 ELITE** 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 ELITE** is a suspension concentrate formulation with protectant, curative, translaminar and systemic properties for the control of economically important diseases. **FORTRESS ELITE** 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 C<sub>1</sub> 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 ELITE** also contains chlorothalonil. Chlorothalonil is a multi-site, non-systemic foliar fungicide with protective action. It operates by means of conjugation with, and depletion of, thiols (particularly glutathione) from germinating fungal cells. This leads to the disruption of glycolysis and energy production.

## RESISTANCE MANAGEMENT

For resistance management, **FORTRESS ELITE** is a group code 11 and M5 fungicide. Any fungus population may contain individuals naturally resistant to **FORTRESS ELITE** and other group code 11 and M5 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 ELITE** or any other group code 11 and M5 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 ELITE** 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 ELITE** should always be applied preventively as described in the recommendations table.
- **FORTRESS ELITE** must be applied as a full cover spray.
- Do not reduce the dosage rates below that recommended on the label.
- Never use **FORTRESS ELITE** 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 ELITE** 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 ELITE** 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. Ensure constant agitation. **Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank overnight.**

## COMPATIBILITY

**FORTRESS ELITE** is not compatible with products containing heavy metals. The compatibility of **FORTRESS ELITE** 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. Ensure thorough agitation of the mixture in the tank during mixing and spraying.

### Influence of rain on application:

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

## GROUND APPLICATION

**FORTRESS ELITE** may be applied with conventional high-volume spray equipment. Calibrate the apparatus before application to ensure that the correct dosage is applied. Ensure uniform distribution of the spray volume throughout the target 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 aerially 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 downdraughts 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.

### **RECOMMENDATIONS**

CROP & DISEASE	DOSAGE RATE	REMARKS
<b>BRASSICA</b>  <b>White Blister</b> ( <i>Albugo candida</i> )	<b>Ground application:</b>  3.125 l / ha	Apply up to three (3) sprays at 7-day intervals when the weather conditions favour disease development.  Do not exceed three (3) applications of <b>FORTRESS ELITE</b> per season.  <b>Tractor application:</b> 450 – 700 l water / ha.
<b>CARROTS</b>  <b>Late Blight</b> ( <i>Alternaria dauci</i> )	<b>Ground and aerial application:</b>  2.8 l / ha	Start applications prior to disease development and continue throughout the season every 7 days.  Do not apply more than two (2) foliar applications of <b>FORTRESS ELITE</b> or other strobilurins (QoI Group 11 Fungicides) before alternating with a fungicide that has a different mode of action.  Do not exceed six (6) foliar applications of <b>FORTRESS ELITE</b> or other QoI Group 11 fungicides per crop per year.  Do not apply <b>FORTRESS ELITE</b> with wetting agents.  <b>Tractor application:</b> Use at least 200 – 750 l water / ha.
<b>TOMATOES</b>  <b>Early blight</b> ( <i>Alternaria solani</i> )	<b>Ground application:</b>  330 mL / 100 l water, maximum of 2.28 l / 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

	<p>OR</p> <p>330 mL / 100 L water <b>FORTRESS ELITE</b></p> <p>Alternated with</p> <p>100 mL / 100 L water <b>SOLSAN SC</b></p>	<p>alternated every 7 days with other products registered for early blight control.</p> <p><b>FORTRESS ELITE</b> alternated with <b>SOLSAN SC</b> in a 7-day cycle will also control <b>late blight</b> (<i>Phytophthora infestans</i>) preventatively.</p> <p>Do not exceed six (6) applications of <b>FORTRESS ELITE</b>, or products containing azoxystrobin.</p> <p><b>Tractor application:</b> 500 – 1400 L water / ha. For 500 – 690 L water / ha use the 330 mL / 100 L water dosage. For 700 – 1400 L water / ha use the 2.28 L / ha water dosage. Do not exceed 2.28 L <b>FORTRESS ELITE</b> / ha.</p>
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#### ACKNOWLEDGEMENT OF TRADEMARKS

Solsan SC (L 9590)

Meridian Agrochemical Company (Pty) Ltd

## WAARSKUWINGS

### Onthoudingsperiode

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

Koolgewasse.....	7 dae
Tamaties.....	7 dae
Wortels.....	1 dag

**BELANGRIK:** Die aanbevole onthoudingsperiode tussen laaste toediening en oes voldoen aan plaaslike residuvlakte, maar mag dalk nie aan die vereistes vir uitvoer voldoen nie.

- Skadelik indien ingesluk of ingeasem word.
- Giftig vir visse en baie giftig vir ander waterlewe. Mag langtermyn negatiewe invloed op wateromgewing veroorsaak.
- Vermy kontak met vel of oë, aangesien die produk oog- en velirritasie mag veroorsaak, asook velsensitisasie.
- Bêre agter slot-en-grendel in 'n koel, droë plek, weg van voedsel, voer en kunsmis.
- Hou buite bereik van kinders, oningesigte persone en diere.
- **FORTRESS ELITE** is sonder enige fitotoksieseitskade op die mees belangrikste kommersiële kultivars getoets. Meer sensitiewe kultivars mag in die toekoms vrygestel word wat eers getoets moet word; hiervoor moet **FORTRESS ELITE** eers op 'n klein toetsoppervlakte aangewend word, alvorens groot kommersiële bespuitings gemaak word.
- **Herbetreding:** Moenie behandelde gebied betree alvorens spuitneerslag droog is nie, tensy beskermende oorklere gedra word.

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

- Vermy kontak met die oë, vel en die inaseming van dampe en spuitnewel.
- Dra beskemende klere (bv. rubber handskoene) en gesigskerm tydens die vermenging en aanwending van die spuitmengsel.
- In die geval van direkte velkontak, was onmiddellik met seep en water.
- In die geval van direkte oogkontak, spoel vir ten minste 15 minute met skoon water en verwijder kontaklense indien teenwoordig.
- Was besoedelde klere daagliks en was jouself.
- Moenie eet, drink of rook tydens vermenging of toediening van die produk of voordat gesig en hande gewas is nie.
- Vermy wegdrywing van spuitnewel na ander gewasse, weiding, riviere, damme en gebiede wat nie behandel moet word nie.
- Maak toedieningsapparaat voor en na gebruik skoon. Uitspoelwater moet nie gewasse, weidings, riviere, damme of ander waterbronne besoedel nie.
- Keer die leë houer om oor die spuittenk of mengbak en dreineer vir minstens 30 sekondes nadat die vloeistof tot 'n gedrup verminder het. Spoel die houer daarna **drie keer** uit met 'n volume water gelykstaande aan 'n minimum van 30% van die inhoud van die houer. Gooi die spoelwater by die inhoud van die spuittenk voordat die houer op die voorgeskrywe manier vernietig word.
- Vernietig die leë houer deur gate daarin te kap en plat te slaan voordat dit op 'n veilige manier verbrand of begrawe word en vir geen ander doel gebruik word nie.
- Voorkom die besoedeling van voedsel, voer, drinkwater en eetgerei.
- Moenie **FORTRESS ELITE** op enige gewas of situasie aanwend wat nie in die voorskrifketiket verskyn nie.
- Moenie hierdie produk in kombinasie of tenkmengsel met enige ander produk of landboumiddel gebruik wat nie spesifiek op hierdie etiket gelys is nie. Meridian Agrochemical Company (Edms.)

- Bpk. aanvaar geen verantwoordelikheid vir enige negatiewe gevolge indien die instruksies op die etiket nie nagekom word nie, tensy 'n Meridian verteenwoordiger vooraf geraadpleeg is.
- Indien **FORTRESS ELITE** in 'n tenkmengsel met ander aanbevole produkte gebruik word, moet oorweging aan die beperkings van daardie betrokke produkte geskenk word.

## **GEBRUIKSAANWYSINGS**

**Gebruik slegs soos aangedui.**

### **METODE VAN WERKING**

**FORTRESS ELITE** is 'n suspensiekonsentraat formulering met beskermende, genesende, translaminêre en sistemiese eienskappe vir die beheer van ekonomies belangrike siektes. **FORTRESS ELITE** bevat asoksiestrobien, 'n swamdoder in die stabilurien chemiese groep wat 'n Kinoon buite-inhiberende swamdoder is. Die biochemiese metode van werking van asoksiestrobien is die inhibering van mitochondriale respirasie deurdat dit die elektronoordrag in die mitochondria van die sel tussen sitochroom b en sitochroom C1 by die ubiqinol oksiderende-area blokkeer. Op die plantoppervlak is die primêre biologiese metode van werking die inhibering van spoorontkieming en miseliumgroei en wys ook anti-sporale aktiwiteit.

**FORTRESS ELITE** bevat ook chlorotalonil. Chlorotalonil is 'n "multi-site", nie-sistemiese blaarswAMDoder met beskermende eienskappe. Die werking geskied deur die samevoeging van, en die uitputting van, tiole (veral glutatioon) van ontkiemende swamselle. Dit lei tot die ontwrigting van glikolise en energieproduksie.

### **WEERSTANDSBESTUUR**

Vir weerstandsbestuur is **FORTRESS ELITE** 'n groepkode 11 en M5 swamdoder. Enige swampopulasie mag individue insluit wat 'n natuurlike weerstand teen **FORTRESS ELITE** of enige ander groepkode 11 en M5 swamdoder het. Indien hierdie swamddoders herhaaldelik aangewend word, kan die weerstandbiedende individue uiteindelik die swampopulasie oorheers. Hierdie weerstandige swamme sal waarskynlik nie deur **FORTRESS ELITE** of enige ander groepkode 11 en M5 swamdoder beheer word nie.

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

- Vermy die eksklusieve herhaalde gebruik van swamddoders met dieselfde groepkode. Wissel af met, of gebruik tenkmengsels van, geregistreerde produkte in verskillende swamddodergroepkodes.
- Sien toepaslike individuele produktikette wanneer middels afgewissel word of tenkmengsels met geregistreerde produkte gebruik word.
- 'n Sputprogram met mengsels of afwisselende middels met 'n ander metode van werking mag die opbou van weerstandigheid 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 effektiief is met die gebruik van **FORTRESS ELITE** soos voorgeskryf nie, mag daar 'n weerstandbiedende-populasie (swameras) teenwoordig wees. Indien so 'n weerstandbiedende-populasie positief geïdentifiseer word, moet daar onmiddellik 'n swamddoderbespuiting wat 'n ander werkwyse 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 weerstandsbesturspraktyke 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 ELITE moet altyd voorkomend aangewend word** soos in die aanbevelingstabel beskryf word.
- FORTRESS ELITE** moet as 'n voldekbespuiting toegedien word.
- Moenie die dosis verlaag na onder dié van die etiket aanbeveling nie.
- Moet nooit **FORTRESS ELITE** as 'n korrektiewe of genesende behandeling aanwend, of nadat 'n onsuksesvolle behandeling van enige produk gemaak is nie.

- Wanneer van tenkmengsels of afwisseling met ander swamdoders gebruik gemaak word, gebruik geregistreerde mengvennote wat bevredigende siektebeheer sal verseker indien alleen teen die mengdosis gebruik word.

## MENGINSTRUKSIES

Maak die spuittenk halfvol met skoon water. Voeg die verlangde hoeveelheid **FORTRESS ELITE** by die spuitwater terwyl dit geroer word en maak tenk vol met water tot by die verlangde volume. **Nadat die spuittenk volgemaak is en gedurende die spuitproses, moet die mengsel voortdurend geroer word totdat die spuittenk leeg is.** Indien bespuiting onderbreek word, moet deeglike roering plaasvind voordat met bespuiting voortgegaan word.

Indien **FORTRESS ELITE** in tenkmengsels met ander produktes gebruik word, moet aandag aan al die waarskuwings, voorsorgmaatreëls en gebruiksaanwysings op daardie spesifieke produksetiket gegee word. Eerstens moet 'n klein hoeveelheid van die produktes apart met water gemeng word. Let op vir enige tekens van onverenigbaarheid soos flokkulasie ens. Verseker konstante roering. **Tenkmenngsels moet onmiddellik uitgespuit word en nie toegelaat word om in die spuittenk oornag te staan nie.**

## VERENIGBAARHEID

**FORTRESS ELITE** is nie verenigbaar met produktes wat swaarmetale bevat nie. Die verenigbaarheid van **FORTRESS ELITE** met ander produktes sal van die formulerings van die onderskeie produktes 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 produktes 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. Verhoed dat spuitbane oorvleuel, want dit kan tot gewasskade lei. Verseker dat die spuitvolume egalig oor die teikenarea toegedien word. Verseker deeglike roering van die mengsel gedurende vermenging en toediening.

### Invloed van reën op toediening:

Indien dit binne twee ure na toediening sou reën, herhaal die bespuiting.

## GRONDTOEDIENING

**FORTRESS ELITE** kan met konvensionele hoë-volume toerusting toegedien word. Kalibreer die spuittoerusting voor toediening om te verseker dat die korrekte dosis toegedien word. Verseker dat die verspreiding van die spuitvolume egalig oor die teikengebied geskied.

## LUGTOEDIENING

### Verhoed ten alle tye chemiese wegdrywing.

Lugtoediening mag slegs deur 'n geregistreerde lugbespuitingsoperator 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 gesikte atomiseringsapparaat (hidroliese spuitkoppe of roterende newelspuite) wat die vereiste druppelgrootte en bedekking op die teikengebied sal produseer, maar wat die minste verlies van produk deur wegdrywing sal verseker.
- Die operator moet 'n spuitkopstelsel opstel wat 'n druppelspektrum met die kleinste moontlike relatiewe spanwydte sal produseer.

- Al die sputkoppe 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 sputmengsel 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 sputbalk moet tussen 3 en 4 meter bokant die teiken gehandhaaf word.
- Moenie sput 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 swaaihigrometer 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 inversielaa g te sput) 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 sputtwolk vanaf die teikenarea.
- Moenie sput wanneer die windspoed 15 km per uur oorskry nie.
- Onder die volgende klimaatstoestande mag wegdrywing 3 tot 5 km ver plaasvind:
  - i. Bewolkte weerstoestande met 'n relatiewe humiditeit bokant 80% en stadige lugbeweging van minder as 5km per uur. Indien sulke toestande voortduur, moet lugtoediening **NIE** plaasvind waar sensitiewe gewasse, gewassaailinge of sagtevrugtebome soos bv. appels in botstadium of in vroeë ontwikkelingstadiums binne 5 km teenwoordig is nie, vanaf die naaste sputbaanwolk weg van die teikengebied.

#### Algemeen

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

## AANBEVELINGS

GEWAS & SIEKTE	DOSIS	OPMERKINGS
<b>KOOLGEWASSE</b> <b>Witroes</b> ( <i>Albugo candida</i> )	<b>Grondtoediening:</b> 3.125 l / ha	Dien tot drie (3) bespuitings toe met 7-dag intervalle wanneer die weersomstandighede die ontwikkeling van die siekte bevoordeel.  Moenie drie (3) <b>FORTRESS ELITE</b> toedienings per seisoen oorskry nie.  <b>Trekkertoediening:</b> 450 – 700 l water / ha.
<b>WORTELS</b> <b>Laattroes</b> ( <i>Alternaria dauci</i> )	<b>Grond- en lugtoediening:</b> 2.8 l / ha	Begin met toedienings voordat siekte-ontwikkeling plaasvind en gaan regdeur die seisoen elke 7 dae voort met toedienings.  Moenie meer as twee (2) <b>FORTRESS ELITE</b> blaarbepsuitings of enige ander stabiliuriene (Qol Groep 11 swamddoders) toedien voordat afgewissel word met 'n swamddoder met 'n ander metode van werking.  Moenie meer as ses (6) <b>FORTRESS ELITE</b> blaarbepsuitings of enige ander Qol Groep 11

		<p>swamdoders per gewas per jaar toedien nie.</p> <p>Moenie <b>FORTRESS ELITE</b> saam met benattingsmiddels toedien nie.</p> <p><b>Trekkertoediening:</b> Gebruik ten minste 200 – 750 l water / ha.</p>
<b>TAMATIES</b>  <b>Vroeë roes</b> ( <i>Alternaria solani</i> )	<p><b>Grondtoediening:</b></p> <p>330 mL / 100 l water, maksimum van 2.28 l / ha</p> <p>OF</p> <p>330 mL / 100 l water <b>FORTRESS ELITE</b></p> <p>afgewissel met</p> <p>100 mL / 100 l water <b>SOLSAN SC</b></p>	<p>Dien toe in blokke van twee (2) opeenvolgende bespuitings 7 – 10 dae uitmekaar wanneer die weerstoestande gunstig is vir die ontwikkeling van die siekte.</p> <p>Alternatiewelik kan toedienings met 14-dag intervalle herhaal word op voorwaarde dat hierdie toedienings elke 7 dae afgewissel word met ander produkte wat vir die beheer van vroeë roes geregistreer is.</p> <p><b>FORTRESS ELITE</b> afgewissel met <b>SOLSAN SC</b> in 'n 7-dag siklus sal ook <b>Iaatroes</b> (<i>Phytophthora infestans</i>) voorkomend beheer.</p> <p>Moenie meer as ses (6) <b>FORTRESS ELITE</b> toedienings of produkte wat asoksistriebien bevat per seisoen toedien nie.</p> <p><b>Trekkertoediening:</b> 500 – 1400 l water / ha. Vir 500 – 690 l water / ha gebruik die 330 mL / 100 l water dosis. Vir 700 – 1400 l water / ha gebruik die 2.28 l / ha water dosis. Moenie 2.28 l <b>FORTRESS ELITE</b> / ha oorskry nie.</p>

#### ERKENNING VAN HANDELSMERKE

Solsan SC (L 9590)

Meridian Agrochemical Company (Edms.) Bpk.