

READ THE LABEL BEFORE USE. KEEP OUT OF REACH OF CHILDREN AND ANIMALS, SHAKE THE BOTTLE WELL BEFORE USE



Fungicide

FORTRESS ULTRA 325 SC

Reg. No. L 10450 Act No. 36 of 1947
N-AR 1684

3: 27/7/2022 – Oct2022

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

ACTIVE INGREDIENTS

azoxystrobin (strobilurin) 200 g/l
difenoconazole (triazole) 125 g/l

GROUP 11;3 FUNGICIDE



WARNING



Hazard Statements:

Harmful if inhaled.
Causes serious eye irritation.
Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
Avoid release into the environment.



villa 

UN Number: 3082

Registration holder: Meridian Agrochemical Company (Pty).
Ltd. Co. Reg. No. 2000/010819/07
65 Botes Road, Glen Marais, Kempton Park, 1619
Tel. (011) 396 2233
Website: www.villacrop.co.za

IN CASE OF POISONING / 24 HR EMERGENCY NUMBERS:
Griffon Poison Information Centre (National): +27 82 446 8946
Poison Information Helpline (National): +27 861 555 777
24 Hr Transport / Spill emergency no: (Hazcall24) +27 86 044 4411
(Client: Villa Crop Protection)

REFER TO DETAILS AS PRINTED ON CONTAINER / BAG

DIRECTIONS FOR USE ENCLOSED
Batch Number: _____
Expiry / Date: _____
Date of Manufacture: _____

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 Reg. No. L 10450 Act No. 36 of 1947
 N-AR 1684
 FRAC FUNGICIDE GROUP CODE: 11 & 3

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WARNINGS**Withholding periods**

Allow the following number of days between the last application and harvest:	
Brassica (broccoli, cabbage, brussels sprouts, cauliflower, kale)	3 days
Carrots	7 days
Cucurbits (melon, watermelon, pumpkin, squash, zucchini, cucumber, gherkin, excluding patty pans)	3 days
Dry Beans	45 days
Groundnuts	28 days
Maize, sweetcorn*	28 days
Nuts (almonds)	28 days
Nuts (cashew, macadamia, pecan)	45 days
Nuts (pistachio)	14 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.

***Maize, sweetcorn: Adhere to a withholding period of 28 days if the lower dosage is applied and 3 months for the higher dosage. At the higher dosage rate, do not allow any grazing.**

Hazard statements:

Harmful if inhaled.
Causes serious eye irritation
Very toxic to aquatic life with long lasting effects

- 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 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**Precautionary statements:**

Avoid breathing dust, mists or spray.
Wash hands thoroughly after handling. Do not touch eyes.
Use only outdoors or in a well-ventilated area.
Avoid release into the environment.
Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical help.
Collect spillage.
Dispose of contents/container to suitable landfill in accordance with local regulations

- In case of direct contact with skin, wash immediately with soap and water.
- 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.
- **TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS:** Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container three (3) times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler (www.croplife.co.za). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.
- Prevent contamination of food, feed, drinking water and eating utensils.
- **Do not** apply **FORTRESS ULTRA 325 SC** 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 325 SC** is used in a tank mix with other recommended products, consideration should be given to the restrictions of those respective products.

Relevant hazardous components	
Azoxystrobin	18.9 g/l
Difenoconazole	<12.3 g/l
Ethylene glycol	<5 g/l

FIRST AID TREATMENT

Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure.

Inhalation: Remove person from contaminated area to fresh air and assist breathing as needed. Keep affected person warm and at rest. Supply oxygen if necessary. Treat symptomatically and supportively. **Obtain medical attention if irritation occurs.**

Skin: Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap.

Eyes: Flush eyes with clean water for at least 15 to 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after five (5) minutes and continue rinsing. **Obtain medical attention if irritation persists.**

Ingestion: Seek medical attention or call a poison control centre for treatment advice. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water.

RESISTANCE MANAGEMENT

FORTRESS ULTRA 325 SC is a group code 11 and 3 fungicide. Any fungus population may contain individuals naturally resistant to **FORTRESS ULTRA 325 SC** 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 325 SC** 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 325 SC** 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>.

MODE OF ACTION

FORTRESS ULTRA 325 SC is a suspension concentrate formulation with protectant, curative, translaminar and systemic properties for the control of economically important diseases. **FORTRESS ULTRA 325 SC** 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 shows anti-sporulant activity.

FORTRESS ULTRA 325 SC 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.

USE RESTRICTIONS

- **FORTRESS ULTRA 325 SC** should always be applied preventively as described under “RECOMMENDATIONS”.
- **FORTRESS ULTRA 325 SC** must be applied as a full cover spray.
- Do not reduce the dosage rates below that recommended on the label.
- Never use **FORTRESS ULTRA 325 SC** 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.

DIRECTIONS FOR USE - Use only as directed.

MIXING INSTRUCTIONS

- Half fill the spray tank with clean water.
- Add the recommended amount of **FORTRESS ULTRA 325 SC** 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 325 SC** needs to be used in tank mix combinations, full cognisance must be taken of all **WARNINGS, PRECAUTIONS** and **DIRECTIONS FOR USE** on that 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 325 SC** 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 325 SC**.
- 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 325 SC** 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** do 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 to 75 % of the wingspan to prevent droplets from entering the wingtip vortices.

Application Parameters

- A minimum volume of 30 to 40 litres spray mixture per hectare 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 to 35 droplets per square cm must be recovered at the target.
- A droplet spectrum with a VMD of 280 to 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 4 metres 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:
 - Reduced efficacy due to suspension and evaporation of small droplets in the air (Which leads to inadequate coverage).
 - 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.
 - 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 (3) hours after application, the application must be repeated.

RECOMMENDATIONS

Crop & Disease	Dosage Rate	Remarks
<p>Brassica (Broccoli, brussels sprouts, cabbage, cauliflower, kale including all cultivars and hybrids of these)</p> <p>Anthracnose (<i>Colletotrichum higginsianum</i>)</p>	<p><u>Ground and Aerial application:</u> 800 to 1000 ml / ha</p>	<p>Apply as part of a protectant programme before disease occurs when conditions are conducive for disease development.</p> <p>Apply as part of a 7 to 10-day spray schedule.</p> <p>Do not apply more than one (1) application of FORTRESS ULTRA 325 SC before following up with products with a different mode of action. Do not apply more than four (4) applications of FORTRESS ULTRA 325 SC per season. FORTRESS ULTRA 325 SC can be used in a spray programme with other registered products that do not contain Azoxystrobin or Difenoconazole.</p> <p>Apply in sufficient amount of water to ensure complete coverage. The addition of a spreading/penetrating type adjuvant may enhance efficacy.</p> <p><u>Tractor application:</u> 250 to 1000 litres water per hectare. <u>Aerial application:</u> 30 to 40 litres water per hectare.</p>
<p>Carrots</p> <p>Alternaria blight (<i>Alternaria dauci</i>)</p>	<p><u>Ground application:</u> 500 ml / ha</p>	<p>Apply as part of a protectant programme before disease occurs.</p> <p>Apply no more than two (2) consecutive sprays 7 to 10 days apart, starting as soon as the first true leaves are discernible or as soon as the first symptoms become visible. If disease pressure is high, use the shortest interval and the highest rate.</p> <p>Do not apply more than two (2) applications of FORTRESS ULTRA 325 SC per season. Alternate treatments with chemicals with a different mode of action.</p> <p>FORTRESS ULTRA 325 SC can be used in a spray programme with other registered products that do not contain Azoxystrobin or Difenoconazole.</p> <p><u>Tractor application:</u> 200 to 750 litres water per hectare.</p>

Crop & Disease	Dosage Rate	Remarks
<p><u>Cucurbits</u> (Muskmelon, Cucumber, gherkins, watermelon, pumpkin, squash, zucchini including all cultivars and hybrids of these)</p> <p>Powdery mildew (<i>Erysiphe cichoracearum</i>)</p> <p>Alternaria leaf blight (<i>Alternaria cucumerina</i>)</p>	<p><u>Ground application:</u> 625 ml / ha</p> <p><u>Ground and Aerial application:</u> 730 to 1000 ml / ha</p>	<p>Apply up to three (3) consecutive sprays 7 to 10 days apart starting at flower initiation.</p> <p>Apply in sufficient water volumes to ensure adequate coverage.</p> <p>Do not apply FORTRESS ULTRA 325 SC with wetting agents.</p> <p>Do not exceed three (3) applications of FORTRESS ULTRA 325 SC per season.</p> <p><u>Tractor application:</u> Minimum 500 litres water per hectare. <u>Aerial application:</u> 30 to 40 litres water per hectare.</p>
<p><u>Dry beans</u></p> <p>Leaf Spot (<i>Alternaria zinnia</i>)</p>	<p><u>Ground application:</u> 500 ml / ha</p>	<p>Apply two (2) consecutive spray 14 days apart starting at flower initiation.</p> <p>Do not exceed two (2) applications of FORTRESS ULTRA 325 SC per season.</p> <p><u>Tractor application:</u> 250 to 500 litres water per hectare.</p>
<p><u>Groundnuts</u></p> <p>Early leaf spot (<i>Cercospora arachidicola</i>)</p>	<p><u>Ground application:</u> 500 ml / ha</p>	<p>Apply two (2) consecutive sprays at 14 to 21-day intervals starting at first signs of disease, or at flower initiation (10 to 12 weeks after planting) if no disease is present.</p> <p>Do not exceed two (2) applications of FORTRESS ULTRA 325 SC per season.</p> <p><u>Tractor application:</u> 300 to 400 litres water per hectare.</p>
<p><u>Maize and Sweetcorn</u></p> <p>Brown Rust (<i>Puccinia Sorgii</i>)</p> <p>Grey leaf spot (<i>Cercospora zeina</i>)</p>	<p><u>Ground and Aerial application:</u> 500 to 750 ml / ha</p> <p>OR</p> <p>4.5 to 6.8 ml / 100 m row</p>	<p>Start application before 3 % of the total leaf surface shows disease symptoms. It is important that applications are purely preventative for effective disease control.</p> <p>Applications must be made at 21 to 28-day intervals. Use the shorter application interval and higher rate if disease pressure is very high.</p> <p>With short season hybrids when the first spray was applied after pollination, it will probably be sufficient to control the disease and further applications may not be necessary. In cases where the initial application was applied at a very early stage, a third application may be made.</p> <p>Do not exceed three (3) applications of FORTRESS ULTRA 325 SC per season.</p> <p>If present at the time of application, FORTRESS ULTRA 325 SC will also control Northern leaf blight.</p> <p><u>Tractor application:</u> 250 to 450 litres water per hectare OR 2 to 4 litres per 100 m row. <u>High clearance tractor application:</u> 150 to 300 litres water per hectare OR 2 to 4 litres per 100 m row. <u>Aerial application:</u> 30 to 40 litres water per hectare. <u>Knapsack sprayer application:</u> 60 to 70 litres water per hectare.</p>

Crop & Disease	Dosage Rate	Remarks
<p><u>Nuts</u> (Almonds, Cashew, Macadamia, Pecans, Pistachio)</p> <p>Anthraxnose (<i>Colletotrichum acutatum</i>)</p>	<p><u>Ground and Aerial application:</u></p> <p>500 to 1000 ml / ha</p>	<p>Apply as part of a protectant programme before disease occurs at 10 to 14-day intervals.</p> <p>Do not use an adjuvant on cashews or macadamias.</p> <p>Do not apply more than two (2) consecutive sprays with FORTRESS ULTRA 325 SC. Do not apply more than four (4) applications of FORTRESS ULTRA 325 SC per season.</p> <p>FORTRESS ULTRA 325 SC can be used in a spray programme with other registered products that do not contain Azoxystrobin or Difenoconazole.</p> <p><u>Tractor application:</u> Use water volumes that will ensure complete coverage. <u>Aerial application:</u> 30 to 40 litres water per hectare.</p>
<p><u>Potatoes</u></p> <p>Early blight (<i>Alternaria solani</i>)</p>	<p><u>Ground and Aerial application:</u></p> <p>375 ml / ha</p>	<p>Apply in blocks of two (2) consecutive sprays 7 to 10 days apart when the weather favours the disease.</p> <p>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.</p> <p>FORTRESS ULTRA 325 SC 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.</p> <p>Due to reduced efficacy, Aerial application is only recommended when prevailing conditions preclude application by tractor.</p> <p>Do not exceed six (6) applications of FORTRESS ULTRA 325 SC per season.</p> <p><u>Tractor application:</u> 250 to 750 litres water per hectare. <u>Aerial application:</u> 30 to 40 litres water per hectare.</p>
<p><u>Tomatoes</u></p> <p>Early blight (<i>Alternaria solani</i>)</p>	<p><u>Ground application:</u></p> <p>100 ml / 100 l water</p>	<p>Apply in blocks of two (2) consecutive sprays 7 to 10 days apart when the weather favours the disease.</p> <p>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.</p> <p>FORTRESS ULTRA 325 SC alternated with SOLSAN SC or VALEO 500 SC in a 7-day cycle will also control Late blight (<i>Phytophthora infestans</i>) preventatively.</p> <p>Do not exceed six (6) applications of FORTRESS ULTRA 325 SC, or six (6) applications of products containing Azoxystrobin, or six (6) applications of products containing Difenoconazole per season.</p> <p><u>Tractor application:</u> 500 to 1400 litres water per hectare.</p>

SOLSAN SC (L 9590) and VALEO 500 SC (L 9086) are registered products of **MERIDIAN AGROCHEMICAL COMPANY (PTY) LTD.**