

Fungicide

Zantara®

A systemic emulsifiable concentrate fungicide for the control of the diseases mentioned on maize.

contains:

Bixafen (pyrazolecarboxamide)

Tebuconazole (triazole)

15 l



Zantara®

SEE ENCLOSED PAMPHLET FOR FULL PARTICULARS

Reg. No. L10011 (Act No. 36 of 1947)

A systemic emulsifiable concentrate fungicide for the control of the diseases mentioned on maize.

SIEN INGESLOTE PAMFLET VIR VOLLEDIGE BESONDERHEDE

Reg. Nr. L10011 (Wet Nr. 36 van 1947)

'n Sistemiese emulgeerbare konsentraat swamdoder vir die beheer van die genoemde siektes op mielies.

GROUP / GROEP

7

3

FUNGICIDES / SWAMDODERS



WARNING

HAZARD STATEMENTS:

Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause respiratory irritation.
Suspected of damaging the unborn child.
Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS:

Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wear protective gloves/ protective clothing/ eye protection/ face protection.
If exposed or concerned: Call a POISON CENTER/ doctor/ physician.
If skin irritation or rash occurs: Get medical advice/ attention.

Active ingredients:

Bixafen (pyrazolecarboxamide) 50 g/l
Tebuconazole (triazole)..... 166 g/l

Aktiewe bestanddele:

Bixafen (pyrazolecarboxamide) 50 g/l
Tebuconazole (triazole)..... 166 g/l

REGISTERED BY / GEREGISTREER DEUR:

Bayer (Pty) Ltd / (Edms) Bpk
Reg. 1968/011192/07
P.O. Box/Posbus 143, Isando, 1600
South Africa/Suid-Afrika
TEL: (OFFICE HOURS) / (KANTOORURE) (011) 921 5911

IN CASE OF POISONING PLEASE PHONE / IN GEVAL VAN VERGIFTIGING SKAKEL ASSEBLIEF: 0861 555 777

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Zantara® is 'n geregistreerde handelsmerk van die Bayer AG.

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BATCH NUMBER / LOTNOMMER: See on pack
DATE OF MANUFACTURE / DATUM VERVAARDIG: Sien op houer

UN No. / VN Nr.: 3082

Bayer

RSA/0726/Zantara 15L/
Back Booklet Code: ZA86268655F

WARNINGS:

HAZARD STATEMENTS:

- Causes skin irritation
- Causes serious eye irritation
- May cause an allergic skin reaction
- May cause respiratory irritation
- Suspected of damaging the unborn child
- Very toxic to aquatic life with long lasting effects

DO NOT HARVEST GREEN MEALIE COBS OR GRAIN AND DO NOT GRAZE OR USE PLANTS AS FODDER FROM TREATED MAIZE FIELDS WITHIN 41 DAYS OF LAST APPLICATION.

NOTE: The recommended withholding period between the last application and harvest meets **local** residue requirements but may not meet export requirements. If the treated crop is intended for the export market, consult the relevant exporting organization regarding MRL requirements and withholding periods before application of the product. When this product is used according to the label recommendations set herein, the local MRL will not be exceeded. Bayer (Pty.) Ltd. can however not be held liable for an export crop exceeding the import tolerances of other countries.

Store in original tightly closed containers in a dry, cool and well-ventilated area.

Keep away from food, drinks and animal feedstuffs.

Keep out of reach of 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 inhabitants of the immediate area to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate adjacent areas or crops.

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:

- Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
- Wear protective gloves/ protective clothing/ eye protection/ face protection.
- If exposed or concerned: Call a POISON CENTER/ doctor/ physician.
- If skin irritation or rash occurs: Get medical advice/ attention.

Wash contaminated clothing daily.

Wash with soap and water after use.

Do not eat, drink or smoke whilst mixing or applying before washing hands and face.

Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.

Clean applicator after use and dispose of wash water where it will not contaminate crops, grazing, rivers, dams and boreholes.

Rinse empty container three times with a volume water equal to at least one tenth of that of the container and add the rinsings to the contents of the spray tank before disposing of the container in the prescribed manner.

Destroy empty container by perforation and flattening and never use for any other purpose.

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

RELEVANT SUBSTANCES:

Formulation inert	CAS Number	Conc. (%)
Bixafen	581809-46-3	5.05
Tebuconazole	107534-96-3	16.8
Solvent Naphtha (petroleum), heavy aromatic, <1%	64742-94-5	> 1 – < 10
2-Ethylhexanol propylene ethyleneglycol ether	64366-70-7	> 1 – < 25
N,N-Dimethyl decanamide	4433-76-2	> 1 – < 50

RESISTANCE MANAGEMENT:

Zantara is a group **Code 7** (SDH/Pyrazolecarboxamide) and group **Code 3** (DMI/SBI/Triazole) fungicide. Any fungus population may contain individuals naturally resistant to **Zantara** and other group **Code 7** and group **Code 3** fungicides. The resistant individuals can eventually dominate the fungus population if these fungicides are used repeatedly. These resistant fungi may not be controlled by **Zantara** or any other group **Code 7** and group **Code 3** fungicides. In order to maintain the efficacy of **Zantara** it is necessary to prevent the development of resistance of the diseases against fungicides of the pyrazolecarboxamide and triazole groups.

To delay fungicide resistance:

- Do not reduce the dose rate as recommended on this label.
- Avoid exclusive repeated use of fungicides from the same fungicide group code. Alternate or tank mix with registered products from different fungicide group codes.
- Integrate other control methods (chemical, cultural, biological) into disease control programs.

For the latest crop guidelines refer to the FRAC Website (www.frac.info/frac/index.htm) OR contact the registration holder.

AERIAL APPLICATION: (Maize)

- Notify all inhabitants of the immediate area to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate adjacent areas or water. Please refer to the SANS Code of Practice for the aerial application of agricultural chemicals.
- Aerial application of **Zantara** may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of SANS Code 10118 (Aerial Application of Agricultural Pesticides). Ensure that the spray mixture is distributed evenly over the target area and that the loss of spray material during application is restricted to a minimum. It is therefore essential that the following criteria be met:
- **Volume:** A spray mixture volume of 30 to 40 l per hectare is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy, or be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended above.

- **Droplet coverage:** 25 to 35 droplets per cm² must be recovered at the target area.
- **Droplet size:** A droplet spectrum with a VMD of 280 to 300 microns is recommended. Limit the production of fine droplets less than 150 micron (high drift and evaporation potential) to a minimum.
- **Flying height:** Maintain the height of the spray boom at 3 to 4 metres above the target. Do not spray when aircraft dives, is in a climb or when banking.
- Use suitable **atomising equipment** that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product. The spraying system must produce a droplet spectrum with the lowest possible Relative Span.
- Position **all** the atomisers within the inner 60 to 75 % of the wingspan to prevent droplets from entering the **wingtip vortices**.
- The difference in **temperature** between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8 °C.
- Stop spraying if the **wind** speed exceeds 15 km/h.
- Stop spraying under **turbulent**, unstable and dry conditions during the heat of the day.
- Spraying under temperature **inversion conditions** (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80 % and above) may lead to the following:
 - reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage).
 - damage to other sensitive crops and / or non-target are as through drifting of the suspended spray cloud away from the target field.
- Ensure that the aerial spray operator knows exactly which fields to spray.
- Obtain an assurance from the aerial spray operator that the above requirements will be met and that relevant data will be compiled in a logbook and kept for future reference.

DIRECTIONS FOR USE: USE ONLY AS DIRECTED.

COMPATIBILITY:

Compatibility of **Zantara** with other products was not tested.

MIXING INSTRUCTIONS:

Half fill the spray tank with clean water.

Remove the filter on the top of the tank.

Add the required amount of **Zantara** to the spray tank and top up with water to the required volume while agitating continuously.

Ensure thorough and continuous agitation in the tank during mixing and spraying and do not allow the tank mixture to stand still for any period of time.

Application:

Ensure that the application equipment to be used is in a good working condition, correctly calibrated and not contaminated with other chemicals. Use the spray volumes as indicated in the application table to ensure good coverage.

Influence of rain on application:

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

APPLICATION TECHNIQUES:

Aerial Application:

Refer to aerial application above.

Ground Application:

Zantara may be applied with conventional high volume spray equipment. Calibrate the apparatus before application to ensure that the correct dosage is applied. The distribution of the spray volume must be uniform throughout the target area. Ensure good coverage of the whole plant by using enough water and suitable spraying equipment.

APPLICATION TABLE:

CROP AND DISEASE	DOSAGE	REMARKS
MAIZE Northern corn leaf blight <i>(Setosphaeria turcica. also known as Exserohilum turcicum or Helminthosporium turcicum)</i> , Grey leaf spot <i>(Cercospora zeina previously known in RSA as Cercospora zeae-maydis)</i>	GROUND AND AERIAL APPLICATION: 1200 ml/ha	Timeous application before the disease cycle begins is of critical importance for effective disease control. Zantara should be used in an integrated disease risk management programme with spraying commencing preventatively (especially in *high disease risk areas/conditions) but not later than at the first signs of disease infection (in **low disease risk areas/conditions). Repeat 3-4 weeks later. Use the shorter application interval in the high disease risk area or under high disease risk conditions. Do not apply more than two applications of Zantara per season (if extended disease control is required, a further application with a suitable registered fungicide will be necessary.)
Maize applications: The risk of Arrested Ear Syndrome (Blunt Ear Syndrome) increases dramatically when any applications (crop protection products, fertilizers, foliar feeds, adjuvants, etc.) are made between the V10 – VT (10 th leaf collar – cob tassel emergence) growth stages of maize plants. Applications between the V10-VT growth stages of the crop must be avoided as far as possible		

NOTES:

***High disease risk areas/conditions:**

- Medium to high risk hybrids.
- Medium to high climatic suitability regions where conditions are conducive to the development of the disease (cool moist conditions).
- Dry-land areas under irrigated or with normal to high rainfall.
- Under monoculture and no-till conditions.

NOTES (cont.):

***Low disease risk areas/conditions:**

- Low risk hybrids.
- Low climatic suitability regions where conditions are not conducive to the development of the disease (dry-land with low rainfall conditions).
- Silage crops.
- Where crop rotation with conventional tillage is practised.

The correct timing of application is of critical importance to maintain a high level of control.

- **Zantara** should be applied with suitable spraying equipment at the recommended water volume for the specific equipment.
- Ground (Tractor / Spray rigs) application: Application volume of 300 - 500 litres per hectare.
- Aerial application: Application volume of 30 - 40 litres per hectare.
- Knapsack with handheld boom: Application volume of 50 litres per hectare.
- **Zantara** may cause phytotoxic symptoms on the leaves in the form of yellow bleaching or staining marks, especially when applied earlier than the V18 growth stage (just before tassel), but these symptoms are of a transitory nature and will therefore not adversely affect the yield. In order to reduce the risk of phytotoxicity, it is therefore recommended to position **Zantara** in the later segment (after growth stage V18 of the crop) of an integrated disease management programme.

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WAARSKUWINGS:

GEVAARVERKLARINGS:

- Veroorsaak velirritasie.
- Veroorsaak ernstige oogirritasie.
- Mag allergiese velreaksie veroorsaak.
- Mag lugwegirritasie veroorsaak.
- Vermoede dat dit vrugbaarheid of die ongebore kind beskadig.
- Baie giftig vir waterlewendes organismes met langdurige gevolge.

MOET NIE GROENMIELIE KOPPE OF GRAAN EN MOET NIE BEWEI OF DIE PLANTE VAN 'N BEHANDELDE MIELIELAND GEBRUIK AS VOER BINNE 41 OES NA DIE LAASTE TOEDIENING NIE.

LET WEL: Die aanbevole onthoudingsperiode tussen die laaste toediening en oes voldoen aan die plaaslike residu vereistes maar mag dalk nie voldoen aan uitvoer vereistes nie. Indien die behandelde gewas vir die uitvoermark bestem is, skakel met die betrokke uitvoerliggaam rakende MRL vereistes en onthoudingsperiodes voor toediening van die produk. Wanneer hierdie produk gebruik word in ooreenstemming met die aanbevelings hierin uiteengesit, sal die plaaslike MRL nie oorskry word nie. Bayer (Edms.) Bpk. kan egter nie verantwoordelik gehou word vir 'n uitvoergewas wat die invoer toleransies van ander lande oorskry nie.

Berg in die oorspronklike dig toegemaakte houers in 'n droë, koel en goed geventileerde omgewing.

Hou weg van voedsel, drinkgoed en voer.

Hou buite bereik van kinders, oningeligte persone en diere.

HERBETREDING: Moet nie behandelde gebied betree alvorens die spuitneerslag droog is nie, tensy beskermende oorklere gedra word.

Lugbesuipting: Stel alle persone in die onmiddellike omgewing van die gebied wat behandel gaan word in kennis en reik die nodige waarskuwings uit. Moenie aangrensende gebiede of gewasse bespuit of toelaat dat die sporeinewel 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 AANGESIEN DIE WERKING EN EFFEK DAARVAN BEÏNVOED KAN WORD DEUR FAKTORE SOOS ABNORMALE KLIMAATS- EN BERGINGSTOESTANDE; Kwaliteit van verdunningswater; Verenigbaarheid met ander stowwe wat nie op die etiket aangedui is nie EN die voorkoms van weerstand van die siekte teen die betrokke middel sowel as die metode, tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plante groei, 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.

VOORSORGMATREËLS:

VOORSORGSVERKLARINGS:

- Vermo inaseming van poeier/walm/gas/stuifsel/dampe/spuitstof.
- Dra beskermende handskoene/beskermende klere/oogbeskerming/gesigbeskerming.
- Indien blootgestel of besorg: Kry onmiddellik mediese noodhulp.
- Indien velirritasie of uitslag ontstaan: Kry mediese hulp.

Was besoedelde klere daagliks.

Was met seep en water na gebruik.

Moet nie eet, drink of rook tydens vermenging of toediening alvorens hande en gesig gewas is nie.

Verhoed wegdrywing van spuitstof na ander gewasse, weiding, riviere, damme of gebiede nie onder behandeling nie.

Maak spuitapparaat skoon na gebruik en raak ontslae van uitspoelwater waar dit nie gewasse, weiding, riviere, damme en boorgate kan besoedel nie.

Spoel leë houer drie keer uit met 'n volume water gelyk aan ten minste een tiende van die van die houer en voeg die uitspoelwater by die inhoud van die spuittenk voordat van die houer op die voorgeskrewe metode ontslae geraak word.

Vernietig leë houer deur gate in te maak en slat te slaan en moet vir geen ander doel gebruik nie.

Voorkom besoedeling van voedsel, voer, drinkwater en eetgerei.

RELEVANTE STOWWE:

Formulation inert	CAS Number	Conc. (%)
Bixafen	581809-46-3	5.05
Tebuconazole	107534-96-3	16.8
Solvent Naphtha (petroleum), heavy aromatic, <1%	64742-94-5	> 1 – < 10
2-Ethylhexanol propylene ethyleneglycol ether	64366-70-7	> 1 – < 25
N,N-Dimethyl decanamide	4433-76-2	> 1 - < 50

WEERSTANDSBESTUUR:

Zantara is 'n **groepkode 7** swamdoder (SDHI/Pyrazolecarboxamide) en **groepkode 3** (DMI/SBI/Triazole) swamdoder. Enige swam populasie mag individue insluit wat 'n natuurlike weerstand het teen **Zantara** of ander **groepkode 7** en **groepkode 3** swamdoders. Indien hierdie swamdoders herhaaldelik gebruik word kan die weerstandbiedende individue uiteindelik die swampopulasie oorheers. Hierdie weerstandbiedende swamme sal waarskynlik nie deur **Zantara** of enige ander **groepkode 7** en **groepkode 3** swamdoders beheer word nie. Om die effektiwiteit van **Zantara** te handhaaf, is dit nodig om die ontwikkeling van bestandheid van die swamme teen swamdoders van die pyrazolecarboxamide en triazole groepe te verhoed.

Om swamdoder weerstand te vertraag:

- Moet nie die dosis soos op hierdie etiket aanbeveel verlaag nie.
- Verminder die eksklusiewe herhaaldelike gebruik van swamdoders in dieselfde swamdoder groepkode. Wissel af met, of gebruik tenkmengsels van geregistreerde produkte in verskillende swamdoder groepkodes.
- Integreer ander beheermaatreëls (chemies, verbouing, biologies) in siekte beheer programme.

Vir die nuutste gewas riglyne verwys na die FRAC webtuiste (www.frac.info/frac/index.htm) OF kontak die registrasiehouer.

LUGTOEDIENING: (Mielies)

- Stel alle inwoners van die onmiddellike gebied wat bespuit gaan word in kennis en reik die nodige waarskuwings uit. Moenie oor water en aangrensende gebiede spuit nie en sorg dat spuitstofwegdrywing nie dergelike gebiede besoedel nie. Verwys na die SANS Gebruikskode vir lugtoediening van landbouchemikalieë.
- Lugbespuiting van **Zantara** mag slegs deur 'n geregistreerde lugbespuitingsoperateur met 'n korrek gekalibreerde, geregistreerde vliegtuig volgens die instruksies van SANS 10118 (Aerial Application of Agricultural Pesticides) gedoen word. Verseker dat die spuitmengsel eweredig oor die teikenarea versprei word, en die verlies aan die spuitmengsel tydens toediening tot 'n minimum beperk word. Dit is daarom belangrik om aan die volgende vereistes te voldoen:
- **Volume:** Spuitmengsel volume van 30 tot 40 ℓ per ha word aanbeveel. Hierdie produk is nie teen 'n verlaagde volume getoets nie. Die registrasiehouer kan nie effektiwiteit waarborg, of verantwoordelik gehou word vir enige nadelige effekte indien hierdie produk teen 'n laer volume, as hierbo aanbeveel, toegedien word nie.
- **Druppel bedekking:** 25 tot 35 druppels per cm² moet op die teikenarea herwin word.
- **Druppelgrootte:** 'n Druppelspektrum met 'n VMD van 280 tot 300 mikrons word aanbeveel. Beperk die produksie van druppels kleiner as 150 mikrons (hoë drywing en verdampingspotensiaal) tot 'n minimum.
- **Vlieghoogte:** Handhaaf die hoogte van die spuitbalk bo die teiken op 3 tot 4 meter. Moet nie spuit wanneer die vliegtuig duik, uitklim of draai nie.
- Gebruik geskikte **atomiseringsapparaat** wat die vereiste druppelgrootte en bedekking sal produseer, maar wat die minste verlies van produk sal verseker. Die spuitstelsel moet 'n druppelspektrum produseer met die kleinste moontlike Relatiewe Span.
- Plaas al die atomiseerders in die binneste 60 tot 75% van die vlerkspan om te verhoed dat druppels binne-in die **vlerkpuntvorteks** beweeg.
- Die verskil in **temperatuur** tussen die nat- en droëboltermometer van 'n swaaihgrometer, moet nie 8 °C oorskry nie.
- Stop bespuiting indien die **windspoed** 15 km/h oorskry.
- Stop bespuiting tydens **turbulente**, onstabiele en droë toestande gedurende die hitte van die dag.
- Bespuiting onder temperatuur **inversie toestande** (deur bo of binne die inversie laag te spuit) en/of **hoë lugvog toestande** (relatiewe humiditeit 80 % en meer) mag tot die volgende probleme aanleiding gee:
 - verlaagde effektiwiteit aangesien die druppels as 'n wolk in die lug bly hang en moontlik verdamp (onvoldoende bedekking op teiken).
 - skade aan nie-teiken gewasse of sensitiewe areas as gevolg van wegdrywing van die spuitwolk na nie-teiken areas.
- Verseker dat die Lugbespuitingsoperateur presies weet watter lande bespuit moet word.
- Verkry versekering van die lugbespuitingsoperateur dat aan al die bogenoemde vereistes voldoen sal word en dat data van belang in 'n logboek saamgevat is vir toekomstige verwysing.

GEBRUIKSAANWYSINGS: GEBRUIK SLEGS SOOS AANGEDUI.

VERENIGBAARHEID:

Die verenigbaarheid van **Zantara** met ander produkte is nie getoets nie.

MENG INSTRUKSIES:

- Vul die spuittenk halfpad met skoon water.
- Verwyder die filter aan bokant van spuittenk.
- Voeg die vereiste hoeveelheid **Zantara** in die spuittenk en vul dan met die vereiste volume water terwyl voortdurend geroer word.
- Verseker deeglike en voortdurende roering in die tenk gedurende vermenging en toediening en moenie toelaat dat die tenkmengsel vir enige tydskedure stil staan nie.

Toediening:
Verseker dat die toedieningsapparaat wat gebruik word in 'n goeie werkende toestand is, korrek gekalibreer is en nie gekontamineer is met ander chemiese middels nie. Gebruik die spuitvolumes soos aangedui in die toedieningstabel om deeglike bedekking te verseker.

Invloed van reën op toediening:
Indien dit sou reën binne twee ure na toediening, moet die bespuiting herhaal word.

TOEDIENINGSTEGNIEKE:

Lugbespuiting: Verwys na lugbespuiting hierbo.

Grondtoediening: Zantara mag met konvensionele hoë volume spuitapparaat toegedien word. Kalibreer die spuitapparaat voor toediening om te verseker dat die regte dosis gelewer word. Die verspreiding van die spuitvolume moet egalig oor die teikengebied wees. Verseker goeie bedekking van die hele plant deur genoegsame water en geskikte spuittoerusting te gebruik.

TOEDIENINGSTABEL:

GEWAS / SWAM	DOSIS	OPMERKINGS
MIELIES Noordelike Blaarskroei (<i>Setosphaeria turcica</i> . ook bekend as <i>Exserohilum turcicum</i> of <i>Helminthosporium turcicum</i>), Grysblaarvlek (<i>Cercospora zeina</i> voorheen in RSA bekend as <i>Cercospora</i> <i>zeae-maydis</i>)	GROND- EN LUGTOEDIENING: 1200 ml/ha	Tydige toediening voor die siekte siklus begin is van kritiese belang vir effektiewe siektebeheer. Zantara moet gebruik word in 'n geïntegreerde siekte risikobestuur program deur te begin met voorkomende bespuiting (veral in *hoë siekte risiko gebiede/toestande), maar nie later as met die eerste tekens van die siekte infeksie nie (in **lae siekte risiko gebiede/toestande). Herhaal 3-4 weke later. Gebruik die korter toediening interval in die hoë siekte risiko gebied of onder hoë siekte risiko toestande. Moet nie meer as twee Zantara toedienings per seisoen doen nie (indien verlengde siekte beheer verlang word, sal 'n verdere toediening met 'n geskikte geregistreerde swamdoder nodig wees.)

Mielie aanbeveling: Die risiko van abnormale kopontwikkeling (AED) in mielies verhoog dramaties indien enige toedienings (gewasbeskermingsprodukte, kunsmis, blaarvoedings, byvoegmiddels ens.) tussen V10 - VT groeistadiums toegedien word. Toedienings tussen V10 – VT groeistadiums moet so ver moontlik vermy word.

NOTAS:

- *Hoë siekte risiko gebiede/toestande:**
- Medium tot hoë risiko basters.
 - Medium tot hoë klimaatstoestande geskiktheidsgebiede waar toestande gunstig is vir die ontwikkeling van die siekte (koel vogtige toestande).
 - Droëland gebiede onder besproeiing of met normale tot hoë reënval.
 - Onder monokultuur en geen-bewerking toestande.
- **Lae siekte risiko gebiede/toestande:**
- Lae risiko basters.
 - Lae klimaatstoestande geskiktheidsgebiede waar toestande nie bevorderlik is vir die ontwikkeling van die siekte nie (droëland met lae reënval toestande).
 - Kuilvoer gewasse.
 - Waar wisselbou met konvensionele bewerking toegepas word.
- Die korrekte tydsberekening van toediening is van kardinale belang om 'n hoë vlak van beheer te handhaaf.**
- Grond (Trekker / Spuittoerusting) toediening: Spuit volume van 300 - 500 liter per hektaar.
 - Lugtoediening: Toedieningsvolume van 30 - 40 liter per hektaar.
 - Rugsak met 'n hand spuitbalk: Spuit volume van 50 liter per hektaar.
 - **Zantara** mag fitotoksiese simptome in die vorm van geel vlekke of verbleiking veroorsaak, veral wanneer dit vroeër as die V18 groeistadium (net voor pluimvorming) gespuit sou word, maar hierdie simptome is van verbygaande aard en sal dus nie die opbrengs nadelig beïnvloed nie. Om dus die risiko van fitotoksiteit te verminder, word dit aanbeveel dat **Zantara** in die later segment (na die V18 groeistadium van die gewas) van 'n geïntegreerde siektebeheerprogram gespuit word.