

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	FUNGICIDE / SWAMDODER
GROUP / GROEP	3	FUNGICIDE / SWAMDODER

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:

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 Reg. 1968/011192/07
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IN CASE OF POISONING PLEASE PHONE / IN GEVAL VAN VERGIFTIGING SKAKEL: 0861 555 777

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BATCH NUMBER: See on pack
 LOTNOMMER:

DATE OF MANUFACTURE: Sien op houer
 DATUM VERVAARDIG:

UN No. / VN Nr.: 3082

Bayer

RSA/1121/Zantara 15L/
 Back Booklet Code: 8628865D



Zantara®

Fungicide

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



Packaging / Verpakking:

15 L



HARMFUL SKADELIK



Fungicide

WARNINGS:

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.

Harmful by inhalation and if swallowed.

May cause sensitization by skin contact.

Irritating to eyes and skin.

Toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

Possible risk of harm to the unborn child.

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:

Use only in an area with appropriate ventilation.

Keep away from heat and sources of ignition.

Avoid contact with skin, eyes and clothing.

Wear respirator, rubber gloves, goggles and overall during handling.

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.



RESISTANCE MANAGEMENT:

Zantara is a group **Code 7** (SDHI/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.

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- 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</i> <i>Exserohilum turcicum</i> <i>or Helminthosporium turcicum)</i> , Grey leaf spot <i>(Cercospora zeina</i> previously known in RSA as Cercospora zea-maydis)	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 (10th 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.

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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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