Main Panel
For further information see attached pamphlet
Vir verdere inligting sien aangehegte pamflet

Read the label carefully before opening

XANBAC-D® 200 EC

Reg. No./Nr L2097, Act No. / Wet Nr. 36 of / van 1947
Botswana: Reg. No. W130569, Act No. / Wet Nr. 18 of / van 1999
Malawi Reg. No. / Nr. MW/PCB/2OI9/R/O562
Namibian: Reg. No. N-AR 0834 /Namibiese Reg. Nr. N-AR 0834

An agricultural emulsifiable concentrate contact bactericide and fungicide for the control of the listed diseases on cotton, groundnuts, potatoes, beans, tomatoes and certain other vegetable and horticultural crops.

’n Landboukundige emulgeerbare konsentraat kontak bakterie- en swamdoder vir die beheer van genoemde siektes op katoen, grondbone, aartappels, bone, tamaties en sekere ander groente- en tuinboukundige gewasse.

FUNGICIDE GROUP CODE 34 SWAMDODERGROEPKODE

ACTIVE INGREDIENT: / AKTIEWE BESTANDDEEL:

Dichlorophen .... 200 g/ℓ ………………………..…… Dichlorofen

NET VOLUME ℓ NETTO VOLUME

NULANDIS

<u>REGISTRATION HOLDER / REGISTRASIEHOUER</u>:

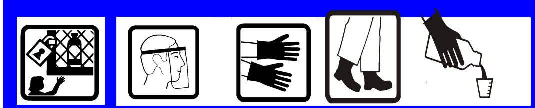
Nulandis™ (A division of AECI Limited) / (‘n Afdeling van AECI Beperk)
Reg. No. / Nr. 1924/002590/06
P.O. Box / Posbus 14418
Witfield, 1467
Tel : (011) 823 8000

IN CASE OF POISONING PLEASE PHONE / IN GEVAL VAN VERGIFTIGING SKAKEL: 021 931-6129

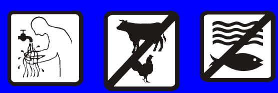
XANBAC-D® is the registered trademark of AECI Limited (Nulandis™ a division of AECI Limited)/ is die geregistreerde handelsmerk van AECI Beperk (Nulandis™ ‘n afdeling van AECI Beperk)

Batch No: **:Lotnommer**
Date of Manufacture: **:Datum van Vervaardiging:**

UN Number: 1993 – Flammable liquids, n.o.s. (Propanol)



CAUTION
VERSIGTIG



Pamphlet

XANBAC-D®200 EC

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FUNGICIDE GROUP CODE 34

ACTIVE INGREDIENT:

Dichlorophen.. 200 g/ℓ

REGISTRATION HOLDER :

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CAUTION

WARNINGS:

ALLOW THE FOLLOWING MINIMUM NUMBER OF DAYS BETWEEN LAST APPLICATION AND HARVESTING;

BEANS, TOMATOES, VEGETABLES & OTHER EDIBLE CROPS	**3 DAYS**
COTTON	**DO NOT APPLY LATER THAN 14 DAYS BEFORE HARVESTING AND NOT AFTER BOLLS HAVE OPENED**
GROUNDNUT HAY	**DO NOT USE AS FODDER PRIOR TO 6 WEEKS AFTER LAST APPLICATION**
CUCUMBERS:	**PHYTOTOXICITY MAY OCCUR AT HIGH TEMPERATURES AND WHEN DOSAGE RATES HAVE BEEN EXCEEDED.**

Poisonous when swallowed.
May cause skin irritation.
Apply to edible crops as soon as it has been planted.
Harmful to fish and other animals.
Store away from food and feedstuffs.
Keep out of reach of children, uninformed persons and animals.
FLAMMABLE: Do not store or handle near open flame.
Re-entry : Do not enter treated area until spray deposit has dried unless wearing protective clothing.
In case of poisoning – CALL A DOCTOR AND MAKE THIS LABEL AVAILABLE TO HIM.
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 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 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 DISEASES 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:

Do not inhale fumes or spray mist.
Wear rubber gloves, boots and face shield when handling concentrate.
Wash contaminated clothing immediately after spraying.
Wash with soap and water immediately after use or accidental skin contact.
Do not eat, drink or smoke whilst mixing or applying or before washing hands and face and changing clothes.
Prevent contamination of food, feed, drinking water and eating utensils.
Prevent drift onto other edible crops, grazing, rivers, dams and areas not under treatment.
Clean applicator thoroughly with Flushsol before re-using and dispose of wash water where it will not contaminate crops, grazing, rivers and dams. Refer to the Flushsol label for directions of use.
When empty, invert the container over the spray tank or mixing tank and allow it to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to at least one tenth of that of the container and add the rinsings to the contents of the spray tank. Destroy the container by puncturing and burying or burning it. Do not use the container for any other purpose.

RESISTANCE WARNING:

For resistance management**, Xanbac-D 200 EC** is a group code 34 fungicide. Any fungus may contain individuals naturally resistant to **Xanbac-D 200 EC** and other group code 34 fungicides. The resistant individuals can eventually dominate the fungus if these fungicides are used repeatedly. The resistant fungi may not be controlled by **Xanbac-D 200 EC** or any other group code 34 fungicide.
To delay fungicide resistance:

- Avoid exclusive repeated use of fungicides from the same fungicide group codes. Alternate with fungicides of different fungicide group codes, or use tank mixtures of different fungicide group codes.
- Integrate other control methods [chemical, cultural, biological] into disease control programmes.

For specific information on resistance management contact the registration holder of this product.

DIRECTIONS FOR USE: USE ONLY AS DIRECTED

AERIAL APPLICATION**:**

Aerial application 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 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 are met:

Equipment:

Use suitable atomizing equipment (hydraulic nozzles or rotary atomizers) that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product through drift.
The operator must use a setup that will produce a droplet spectrum with the lowest possible relative span.
All nozzles / 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 – 40 l spray mixture 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.
A droplet coverage of 50 - 70 droplets per cm^2 must be recovered at the target. The CV for droplet distribution must not exceed 40 %.

A droplet spectrum with a VMD (Volume Median Diameter) of 250 is recommended. Ensure that the production of fine droplets (smaller than 150 microns) is restricted to a minimum.
The height of the spray boom should be maintained at 3-4 metres above the target. Do not spray when aircraft is in a climb, at the top or during a dive, or when banking.
Apply before the crop becomes too dense, thus preventing proper coverage of the plants.

Meteorological conditions:

The difference between the wet and dry bulb readings as determined by a whirling hygrometer, must not exceed 8 °C
Do not spray under turbulent, unstable conditions 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).
Do not spray if the wind speed exceeds 15 km/h.

General:

Ensure that fields are accurately marked and 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.

COMPATIBILITY**:**

XANBAC-D 200 EC is an alkaline formulation. Do not apply with any other product which will reduce the pH in the spray tank or fertilizer concentrate tank feeding to pivot, drip or conventional irrigation systems (e.g. incompatible with ammonium nitrate). **XANBAC-D 200 EC** is only compatible with alkaline pesticides and foliar feeds. Do not mix **XANBAC- D 200 EC** with products which will lower the pH in the spray tank (spraying) and fertilizer concentration tank (fertigation). Use a suitable adjuvant to enhance the activity of **XANBAC-D 200 EC**. When using **XANBAC-D 200 EC** in combination with **CungFu 538 SC** (Reg. No. L7526, Act No. 36 of 1947) or **Kocide 2000** (Reg. No. L6137, Act No. 36 of 1947) use a sticker such as **Bio-Film** (Reg. No. L3684, Act No. 36 of 1947). When used alone as a foliar spray, add a suitable sticker such as **Bio-Film** (Reg. No. L3684, Act No. 36 of 1947). **Do not add any acidifier or adjuvant with acidifying features**.

APPLICATION METHODS:

Leaf application:

For additional fungal and bacterial disease control it is advisable to combine **CungFu 538 SC /Kocide 2000** with **XANBAC-D 200 EC** applications in sufficient water to ensure complete coverage of the plants.

Soil application:

For control of soil borne diseases **XANBAC-D 200 EC** may be applied via the irrigation system or as a drench. If applied by pivot, the irrigation cycle should be operated at maximum speed i.e. 5 - 7 mm. The degree of infection will determine the volume of water applied. It is of utmost importance to apply **XANBAC-D 200 EC** in sufficient water to penetrate and to reach the source of infection or permit adequate protection e.g. potato tubers. It is essential that infection be monitored at a constant basis. **XANBAC-D 200 EC** should not be applied to plants in tunnels, if the plants are under stress. Application to crops under protection should be aimed at the root zone in sufficient water (2 l / 1000 l water) applied when necessary. Do not use **XANBAC-D 200 EC** in closed hydroponic systems or in any instance where water is circulated.

Basal Plant Treatments:

Where stem infections appear either at or below soil level, special care must be taken to wet the target area thoroughly. In such cases use **XANBAC-D 200 EC** as a drench, in not less than 1 000 ℓ water/ha, or as transplant solutions.

Sanitation:
To prevent contamination of disease free lands with soil borne diseases, ensure that no movement of tractors, implements or labourers takes place from infected areas.

APPLICATION TABLE:

CROP	DISEASE	APPLICATION RATE PER 100 ℓ WATER OR AS INDICATED	REMARKS
FIELD CROPS: POTATOES	STEM CANKER (*Rhizoctonia solani*)	3 ℓ/ha 3 ℓ/ha 3 ℓ/ha	**1st Treatment:** At planting: Apply as a row application over the seed potatoes in a minimum of 500 ℓ water/ha. Close furrow immediately after application.* **2nd Treatment:** At or prior to emergence. Apply via sprinkler or pivot irrigation with 5-10 mm (ie. 50 000 – 100 000 ℓ) water/ha, depending on soil type. Use the lower water volume on sandy soils and the higher volume on heavy soils. **3rd Treatment:** Summer plantings: An additional **XANBAC-D 200 EC** application should be made before the flowering stage. **If the above preventative programme has not been followed, XANBAC-D 200 EC may be applied at 3 ℓ/ha as a corrective treatment as soon as the first symptoms are noticed. Repeat 7 days later where a high infection pressure persists.** * With furrow application, the best results will be obtained by mounting one fan jet nozzle over the opened plant furrow and one solid cone nozzle in a position to spray the covering soil.
COTTON	ANGULAR LEAF SPOT (Bacterial blight) (*Xanthomonas malvacearum*)	1 ℓ/ha 1.5 ℓ/ha 1 – 1.5 ℓ/ha	Ground application: Apply 125-200 ℓ water/ha. APPLY AT: 1) Early square stage. 2) Square stage (first flowers) 45-60 days after planting 3) First bolls (60 - 80 days after planting) 4) 7-14 days after 3rd spray 5) 7-14 days after 4th spray Aerial application: Apply in 30-40 ℓ water/ha.

CROP	DISEASE	APPLICATION RATE PER 100 ℓ WATER OR AS INDICATED	REMARKS
VEGETABLES: COLE CROPS	BACTERIAL SPOT (*Pseudomonas maculicola*)	200 mℓ	Commence spraying at the first signs of disease. Repeat at 7-14 day intervals if necessary, using not less than 500 ℓ spray mixture per hectare.
LETTUCE	ROT (*Pythium* spp; *Rhizoctonia solani; Botrytis cinerea*)	3 ℓ/ha 2 ℓ/ha	**<u>Pre-plant</u>:** Apply in at least 500 ℓ water/ha as a total surface spray. **<u>Post-planting</u>:** Apply as a cover spray when the first signs of the disease appear and repeat every 7-14 days if necessary.
CUCUMBERS	CUCUMBER WILT (*Pythium* spp.)	300 mℓ 200 mℓ	**<u>Pre-seeding</u>:** Apply as a drench using 400 mℓ of **XANBAC-D 200 EC** mixture per 10 ℓ plastic container. **<u>Post emergence</u>:** In case of re-infection repeat drench treatment as indicated above, using the 200 mℓ / 100 ℓ water concentration. **Note: Phytotoxicity may occur if the specified dosage rate is increased and at temperatures above 35°C**.
GREEN PEPPERS	DAMPING-OFF	200 mℓ	Apply as a drench treatment over established plants in seedling trays.
SEEDLINGS GENERALLY: VEGETABLES, FLOWERS, ORNAMENTALS, ETC.	DAMPING-OFF	200 mℓ 100 mℓ 200 mℓ 100 mℓ	**<u>Growth medium treatment:</u>** **<u>Pre-seeding</u>:** Use 40 ℓ of the **XANBAC-D 200 EC** mixture to treat one cubic metre of growth medium. **<u>Seedlings</u>:** Above application should be followed up with a drench treatment once the seedlings are established. **<u>Seedbed treatment</u>:** **<u>Pre-emergence</u>:** Apply as a drench treatment. **<u>Post-emergence</u>:** Apply as a drench treatment and repeat every 7-10 days depending on disease pressure.
HYDROPONIC SOLUTIONS	ALGAE spp.	10 mℓ/100 ℓ	Treat water source every 4-5 weeks depending on degree of algal growth.
TOMATOES	DAMPING-OFF (*Rhizoctonia solani* and *Pythium* spp.)	200 mℓ 1.0 - 1.5 ℓ/ha	Apply as a post-plant drench at ± 50-100 mℓ mixture per plant depending on size of plant. For drip irrigated tomatoes apply via drip at 1 - 1.5 ℓ/ha depending on size of plant.

CROP	DISEASE	APPLICATION RATE PER 100 ℓ WATER OR AS INDICATED	REMARKS
BEANS	ROOT ROT (*Rhizoctonia solani* and *Pythium* spp.)	20 mℓ/100 m row 2 ℓ/ha	**<u>Pre-emergence or at emergence</u>**: Apply as a row treatment with planting or at emergence. Use 20 mℓ **XANBAC-D 200 EC** in at least 3 ℓ water per 100 m plant row. **<u>Post emergence</u>**: Use in at least 500 ℓ water/ha to ensure good spray cover.
ONIONS & GARLIC	WHITE BULB ROT (*Sclerotium cepivorum*) PINK ROOT (*Pyrenochaeta terrestris*)	2-3 ℓ/ha	Inspect seedbeds regularly and **spray immediately when disease is observed,** or apply the following programme: **Seedlings:** Commence treatment at 4-6 true leaf stage and repeat every 14 days or at shorter intervals if necessary. **Transplants:** Apply the first application when 2-4 new leaves have formed after transplanting. Repeat within 14 days or when necessary. **Sets:** Commence treatment with emergence of the 6-8th leaf and repeat after 14 days or when necessary. Apply by means of irrigation system in at least 3-5 mm (30 000 - 50 000 ℓ) water/ha or spray in a minimum volume of 800 ℓ water per hectare and irrigate immediately after application with 3-5 mm water. A rigid programme should be followed, but if yellow, disease patches appear in the field these should be treated individually at the higher rate (see notes on sanitation).
GROUNDNUTS	LEAF SPOT (*Cercospora arachidicola*)	2-3 ℓ/ha	Apply the first treatment 3 weeks after emergence. Use the higher dosage where groundnuts were planted repeatedly. Depending on rainfall, prevailing temperatures and disease pressure follow up with 3-4 applications at 2-3 weekly intervals and use the lower rate. **Do not apply in less than 400 ℓ water per hectare.**
	WEB BLOTCH (*Phoma arachidicola*)	2-3 ℓ/ha	For the suppression of web blotch, apply as above.

Bio-Film® is the registered trademark of AECI Limited (Nulandis™ a division of AECI Ltd.)

CungFu 538 SC & Kocide 2000 are the registered tradenames of Nulandis™ (A division of AECI Ltd.)

Pamflet

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SWAMDODERGROEPKODE 34

AKTIEWE BESTANDDEEL:
Dichlorofen..………….........…………………………………………….............. 200 g/ℓ

REGISTRASIEHOUER:

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VERSIGTIG

WAARSKUWINGS:

LAAT DIE VOLGENDE MINIMUM AANTAL DAE TOE TUSSEN LAASTE TOEDIENING EN OES:

BONE, TAMATIES, GROENTE &
ANDER EETBARE GEWASSE **3 DAE**

KATOEN: **MOENIE LATER AS 14 DAE VOOR OES EN NADAT BOLLE BEGIN OOPMAAK TOEDIEN NIE**

GRONDBOON HOOI: **MOENIE VOOR 6 WEKE NA LAASTE BESPUITING VIR VOER DOELEINDES GEBRUIK NIE**

KOMKOMMERS: FITOTOKSISITEIT MAG VOORKOM TEEN HOë TEMPERATURE EN WANNEER TOEDIENINGSHOEVEELHEDE OORSKRY WORD

Giftig wanneer ingesluk.
Mag velirritasie veroorsaak.
Eetbare gewasse behoort behandel te word sodra die plante uitgeplant word.
Skadelik vir visse en ander diere.
Berg weg van voedsel en voer.
Hou buite bereik van kinders, oningeligte persone en diere.
VLAMBAAR: Moenie naby oop vuur geberg of hanteer word nie.
Herbetreding: Moenie behandelde gebied binnegaan alvorens die spuitneerslag droog is nie, tensy beskermende oorklere gedra word.
In geval van vergiftiging - ONTBIED 'N GENEESHEER EN STEL HIERDIE ETIKET AAN HOM BESKIKBAAR.
Lugtoediening - 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 waterbronne bespuit of toelaat dat die sproeinewel 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 BEïNVLOED KAN WORD DEUR FAKTORE SOOS ABNORMALE GROND-, 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 SIEKTES TEEN DIE BETROKKE MIDDEL SOWEL AS DIE METODE, TYD EN AKKURAATHEID VAN TOEDIENING. VERDER AANVAAR DIE REGISTRASIEHOUER NIE VERANTWOORDELIKHEID VIR SKADE AAN GEWASSE, PLANTEGROEI, 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.

VOORSORGMAATREëLS:

Vermy inaseming van dampe of sproeinewel.
Dra rubberhandskoene-, skoene en gesigskerm wanneer konsentraat hanteer word.
Was besoedelde klere onmiddellik na bespuiting. Was onmiddellik na toediening of toevallige velkontak met seep en water.
Moenie eet, drink of rook tydens vermenging of toediening, of voodat hande en gesig gewas en skoon klere aangetrek is nie.
Verhoed besoedeling van voedsel, voer, drinkwater en eetgerei.
Verhoed wegdrywing van die sproeinewel na ander gewasse, weidings, riviere, damme of ander gebiede wat nie behandel word nie.
Maak toedieningsapparaat skoon met **FLUSHSOL** voor her-gebruik en doen weg met waswater waar dit nie gewasse, weiding, riviere en damme sal besoedel nie. Verwys na die **FLUSHSOL** etiket vir gebruiksaanwysings.
Sodra die houer leeg is keer dit om oor die spuittenk of mengbak en dreineer vir minstens 30 sekondes nadat die vloei tot 'n gedrup verminder het. Spoel die houer daarna driekeer uit met ‘n volume water gelyk aan minstens ‘n tiende van die houer en gooi die spoelwater by die inhoud van die spuittenk. Vernietig die houer deur gate daarin te maak en te begrawe of te verbrand. Moenie die houer vir enige ander doel gebruik nie.

WEERSTANDSWAARSKUWING:

XANBAC-D 200 EC is ‘n groepkode 34 swamdoder. Enige populasie van ‘n spesifieke swam mag individue insluit wat ‘n natuurlike weerstand teen **XANBAC-D 200 EC** of enige ander groepkode 34 swamdoder het. Indien hierdie swamdoders herhaaldelik aangewend word, kan die weerstandbiedende individue uiteindelik die swampopulasie oorheers. Hierdie weerstandbiedende swamme sal waarskynlik nie deur **XANBAC-D 200 EC** of enige ander groepkode 34 swamdoder beheer word nie.

Om weerstand teen swamdoders te vertraag:

- Vermy die eksklusiewe herhaaldelike gebruik van swamdoders in dieselfde swamdodergroepkode. Wissel af met swamdoders van verskillende swamdoder groepkodes of gebruik tenkmengsels van verskillende swamdoder groepkodes.
- Integreer ander beheermaatreëls (chemise, verbouing, biologies) in siektebeheerprogramme.

Vir spesifieke inligting oor weerstandsbestuur kontak die registrasiehouer van hierdie produk

GEBRUIKSAANWYSINGS: GEBRUIK SLEGS SOOS AANGEDUI

LUGTOEDIENING:
Lugtoediening mag slegs deur ‘n geregistreerde lugbespuitingsoperateur met ‘n korrek gekalibreerde, geregistreerde vliegtuig volgens die instruksies van SANS 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 kriteria te voldoen:

Toerusting:
- Gebruik geskikte atomiseringsapparaat (hidroliese of roterende spuitkoppe) wat die vereiste druppelgrootte en bedekking sal produseer, maar wat die minste verlies van produk deur wegdrywing sal verseker.
- Die operateur moet ‘n stelsel gebruik wat ‘n druppelspektrum met die kleinste moontlike relatiewe span sal produseer.
- Al die spuitneuse/atomiseerders moet in die binneste 60 tot 75 % van die vlerkspan geplaas word om die beweging van druppels in die vlerkvorteks in te verhoed.

Toedieningsparameters:
- ‘n Minimum volume van 30 – 40 l spuitmengsel per hektaar word aanbeveel. Aangesien hierdie produk nie teen ‘n verlaagde volume getoets is nie, kan die registrasiehouer nie effektiwiteit waarborg, of verantwoordelik gehou word vir enige nadelige effek indien hierdie produk teen ‘n laer volume as hierbo aanbeveel, uit die lug toegedien word nie.
- ‘n Druppelbedekking van 50 - 70 druppels per cm^2 moet op die teikenarea herwin word.
- ‘n Druppelspektrum met ‘n VMD van 250 mikron word aanbeveel. Verseker dat die produksie van fyn druppels (kleiner as 150 mikron) tot ‘n minimum beperk word.
- Die hoogte van die spuitbalk moet op 3-4 meter bo die teiken gehandhaaf word. Moenie spuit wanneer die vliegtuig aan die bopunt is van, of tydens ‘n duik, of terwyl dit uitklim of draai nie.
- Dien toe voordat die gewas te ruig word wat sal verhoed dat plante behoorlik bedek word.
-

Meteorologiese toestande :
- Die verskil tussen die nat- en droëbollesing, soos met ‘n swaaihigrometer bepaal, moet nie 8°C oorskry nie.
- Moenie toedien tydens turbulente, onstabiele toestande gedurende die hitte van die dag wanneer styg en dalende konveksie windbeweging plaasvind nie.
- Moenie toedien onder temperatuur inversie toestande (deur bo of binne die inversielaag te spuit) nie.
- Moenie spuit indien die windspoed 15 km/uur oorskry nie.

Algemeen :
- Sorg dat die lande akkuraat gemerk is en die spuitoperateur presies weet watter lande gespuit moet word.
- Verkry ‘n versekering van die spuitoperateur dat aan die bogenoemde vereistes voldoen sal word.

VERENIGBAARHEID**:**

XANBAC-D 200 EC is ‘n alkaliese produk en moenie met enige middel gemeng word wat die pH sal verlaag van die spuitmengsel in die tenk of misstof konsentraattenk, wat die spilpunt, drup- of konvensionele besproeiingsisteem voed, nie (bv. onverenigbaar met ammonium nitraat). **XANBAC-D 200 EC** is slegs met alkaliese plaagdoders en misstowwe verenigbaar. Moenie **XANBAC-D 200 EC** met produkte meng wat die pH in die spuittenk (bespuiting) en misstof konsentrasietenk (spuitbemesting) sal verlaag nie. Gebruik ‘n geskikte bevorderingsmiddel om die uitwerking van **XANBAC-D 200 EC** te verbeter. Indien **XANBAC-D 200 EC** in kombinasie met **CungFu 538 SC** (Reg. Nr. L7526, Wet Nr. 36 van 1947) of **Kocide 2000** (Reg. Nr. L6137, Wet Nr. 36 van 1947) gebruik word, word ‘n kleefmiddel soos **Bio-Film** (Reg. Nr. L3684, Wet Nr. 36 van 1947) aanbeveel. Indien **XANBAC-D 200 EC** alleen gebruik word as ‘n blaarbespuiting, voeg ‘n geskikte kleefmiddel soos **Bio-Film** (Reg. Nr. L3684, Wet Nr. 36 van 1947) by.

Moenie ‘n versuurder of ‘n hulpmiddel met versurende eienskappe byvoeg nie.

TOEDIENINGSMETODES:

Looftoediening:
Vir bykomende beheer van swam- en bakteriese siektes is dit raadsaam om **CungFu 538 SC** of **Kocide 2000** in kombinasie met **XANBAC-D 200 EC** te gebruik in voldoende water, om sodoende volle bedekking van die plant te verseker.

Grondtoediening:
Vir die beheer van siektes in die grond mag **XANBAC-D 200 EC** via sprinkelbesproeiing óf as ‘n deurdrenking toegedien word. Indien deur middel van 'n spilpunt toegedien, moet die besproeiingsiklus op maksimum spoed gehandhaaf word, dit is 5 - 7 mm. Die graad van infeksie sal die volume water wat gebruik word , bepaal. Dit is van uiterste belang om **XANBAC-D 200 EC** met genoegsame hoeveelhede water toe te dien, om deur te dring en die ondergrondse besmettingsbronne te bereik, óf om voldoende beskerming te bied aan bv. aartappelknolle. Dit is belangrik dat die infeksie op ‘n konstante basis gemoniteer moet word. Moenie **XANBAC-D 200 EC** op plante in tonnels of onder druk, toedien nie. Toediening op gewasse onder beskerming moet gerig wees op die wortelsone in genoegsame water (2 l /

1 000 l water), indien nodig. Moenie **XANBAC-D 200 EC** in suiwer water stelsel gebruik nie, dit wil sê in hidroponiese stelsels waar dieselfde water gesirkuleer word.

Basale plantbehandeling:
Waar stambesmettings op grondvlak ófondergronds voorkom, moet spesiale aandag aan deeglike benatting van die teikenarea gegee word. In sulke gevalle gebruik **XANBAC-D 200 EC** as 'n deurdrenking in nie minder as 'n 1 000 ℓ water/ha nie, óf as uitplant oplossings.

Sanitasie:
Om kontaminasie van onbesmette landerye met grondoorgedraagde siektes te voorkom, maak seker dat geen beweging van trekkers, gereedskap en werkers vanaf besmette na onbesmette lande plaasvind nie.

TOEDIENINGSTABEL:

GEWAS	SIEKTE	TOEDIENINGS-HOEVEELHEID PER 100 ℓ WATER OF SOOS AANGEDUI	OPMERKINGS
AKKERBOUGEWASSE: AARTAPPELS	STAMKANKER (*Rhizoctonia solani*)	3 ℓ/ha	**Eerste Toediening:** Tydens plant: Dien toe as 'n rybehandeling, oor die moere in 'n minimum van 500 ℓ water/ha. Maak die voor direk na toediening toe.*
		3 ℓ/ha	**Tweede Toediening:** Tydens óf voor opkoms: Dien toe via sprinkel- óf spilpuntbesproeiing in 5-10 mm (dit is 50 000 -100 000 l) water/ha, afhangende van die grondtipe. Gebruik die laer volume besproeiingswater vir sanderige grond, en die hoër volume vir swaar gronde.
		3 ℓ/ha	**Derde Toediening:** Someraanplantings: 'n Bykomende **XANBAC-D 200 EC** toediening behoort net vóór blomtyd toegedien te word. **Indien bogenoemde voorkomende program nie gevolg is nie, mag XANBAC-D 200 EC toegedien word teen 3 ℓ/ha as 'n korrektiewe behandeling sodra die eerste tekens van besmetting waargeneem word. Herhaal 7 dae later waar 'n hoë besmettingsdruk aanhou.** * Vir die beste resultate by voor-behandeling, posisioneer een platwaaier-spuitkop oor die oop plantvoor en een soliede koniese spuitkop in 'n posisie om die grond te spuit wat die voor toemaak.

GEWAS	SIEKTE	TOEDIENINGSDOSIS PER 100 ℓ WATER OF SOOS AANGEDUI.	OPMERKINGS
KATOEN	HOEKIGE BLAARVLEK (Bakteriese skroeisiekte) (*Xanthomonas malvacearum*)	1 ℓ/ha 1.5 ℓ/ha 1-1.5 ℓ/ha	Grondtoediening: Dien 125 - 200 ℓ water/ha toe. DIEN TOE TYDENS: 1) Vroeë blomknopstadium ("Square"). 2) Blomstadium (eerste blomme) 45-60 dae na plant. 3) Eerste bolle (60-80 dae na plant). 4) 7-14 dae na 3de bespuiting. 5) 7-14 dae na 4de bespuiting. Lugtoediening: Dien toe in 30-40 ℓ water/ha.
GROENTEGEWASSE: KOOLGEWASSE	BAKTERIESE VLEK (*Pseudomonas maculicola*)	200 mℓ	Begin toediening tydens die eerste tekens van siekte. Herhaal met 7-14 dae intervalle, indien nodig. Moenie minder as 500 ℓ spuitmengsel per ha gebruik nie.
SLAAI	VROT (*Pythium* spp.; *Rhizoctonia solani; Botrytis cinerea*)	3 ℓ/ha 2 ℓ/ha	**Voor plant:** Dien in minstens 500 ℓ water/ha toe, as 'n algehele bespuiting. **Na-plant:** Dien as 'n dekbespuiting toe, sodra die eerste tekens van siekte verskyn. Herhaal elke 7-14 dae indien nodig.
KOMKOMMERS	KOMKOMMER VERWELKSIEKTE (*Pythium* spp.)	300 mℓ 200 mℓ	**Voor saai:** Dien toe as 'n grond deurdrenking (drench). Gebruik 400 mℓ van die **XANBAC-D 200 EC** mengsel per 10 ℓ plastiekhouer. **Na opkoms:** In die geval van 'n herbesmetting herhaal grond deurdrenking soos hierbo aangedui deur gebruik te maak van ‘n 200 mℓ/ 100 ℓ water konsentrasie. **Nota: Fitotoksisiteit mag voorkom indien die dosis oorskry word en by temperature bo 35 ºC.**
GROENRISSIES	SAAILING-VERWELKSIEKTE	200 mℓ	Dien toe as ’n deurdrenk-behandeling oor gevestigde plante in saadlaaie.

SAAILINGE ALGEMEEN: GROENTE, BLOMME, SIERPLANTE, ENS.	SAAILING-VERWELKSIEKTE	200 mℓ 100 mℓ 200 mℓ 100 mℓ	**<u>Groei-medium behandeling:</u>** **<u>Voor saai behandeling</u>:** Dien 40 ℓ van die **XANBAC-D 200 EC** mengsel toe om een m^3 groei-medium te behandel. **<u>Saailinge</u>:** Volg behandeling, soos hierbo aangedui op met 'n deur-drenkbehandeling sodra saailinge gevestig is. **<u>Saadbed behandeling:</u>** **<u>Voor-opkoms</u>:** Dien toe as ‘n deurdrenkbehandeling. **<u>Na-opkoms</u>:** Dien elke 7-10 dae toe as 'n deurdrenkbehandeling, afhangende van die besmettingsdruk.
HIDROPONIESE OPLOSSING	ALGAE spp.	10 mℓ/100 ℓ	Behandel waterbron elke 4-5 weke afhangende van die alge-besmettingstoestand.
TAMATIES	SAAILING-VERWELKSIEKTE (*Rhizoctonia solani* en *Pythium* spp.)	200 mℓ 1.0 -1.5 ℓ/ha	Dien toe as 'n na-plant gronddeurdrenking (drench), teen ± 50 -100 mℓ mengsel per plant, afhangende van die plantgrootte. Vir tamaties onder drupbesproeiing dien deur sisteem toe teen 1 tot 1.5 ℓ/ha afhangende van die plantgrootte.
BONE	WORTELVROT (*Rhizoctonia solani* en *Pythium* spp.)	20 mℓ/100 m ry 2 ℓ/ha	**<u>Voor óf tydens opkoms</u>:** Gebruik as ‘n ry toediening tydens plant óf tydens eerste opkoms van saad teen 20 mℓ **XANBAC- D 200 EC** in minstens 3 ℓ water per 100 m plant rylengte. **<u>Na-opkoms</u>:** Gebruik in minstens 500 ℓ water/ha om goeie bedekking te verseker.
UIE EN KNOFFEL	WITBOLVROT (*Sclerotium cepivorum*) PIENKWORTELVROT (*Pyrenochaeta terrestris*)	2-3 ℓ/ha	Doen gereelde inspeksie van saadbeddings en **spuit onmiddellik sodra siekte opgemerk word,** óf dien die volgende program toe: **<u>Saailinge</u>:** Begin toediening tydens die 4 tot 6-blaarstadium en herhaal elke 14 dae óf gouer indien nodig. **<u>Uitgeplante saailinge</u>:** Begin toediening sodra 2-4 nuwe blare na uitplant gevorm het. Herhaal binne 14 dae of indien nodig.

			<u>Bolletjies</u>: Begin toediening nadat 6-8 blare gevorm het en herhaal na 14 dae indien nodig. Dien toe deur middel van die besproeiingsisteem in 'n minimum van 3-5 mm (30 000- 50 000 ℓ) water/ha of bespuit in minstens 800 ℓ water per hektaar en volg onmiddellik op met 'n besproeiing van 3-5 mm water. 'n Streng program behoort gevolg te word, maar as geel, besmette knolle in die lande verskyn, moet hulle individueel met die hoër dosis behandel word (sien nota i.v.m. sanitasie).
GRONDBONE	BLAARVLEK (*Cercospora arachidicola*)	2-3 ℓ/ha	Dien die eerste behandeling 3 weke na opkoms toe. Gebruik die hoër dosis waar grondbone herhaaldelik geplant was. Herhaal bespuitings afhangende van reënval, heersende temperature en besmettingsdruk, 3-4 keer elke 2-3 weke en gebruik die laer dosis. **Moenie in minder as 400 ℓ water per hektaar toedien nie.**
	SPATSELVLEK (*Phoma arachidicola*)	2-3 ℓ/ha	Vir onderdrukking van spatselvlek, dien toe soos hierbo aangedui.

Bio-Film® is die geregistreerde handelsmerk van AECI Beperk (Nulandis™ 'n afdeling van AECI Beperk)

CungFu 538 SC & Kocide 2000 is die geregistreerde handelsname van Nulandis™ ('n Afdeling van AECI Beperk)