



The Chemical Company

TrichoPlus™

Reg. No.: L7161

Act No. 36 of 1947

Reg. Nr: L7161

Wet Nr 36 van 1947

For full particulars see enclosed pamphlet

Vir volle besonderhede verwys na ingeslote pamflet

A fungal inoculant for the control of crop root diseases and for enhanced plant growth.

,n Swaminokulant vir die beheer van wortelsiektes van gewasse en vir verbeterde plantegroei.

Active ingredient:

Aktiewe bestanddeel:

Trichoderma fertile (strain JM41R)
2 x 10⁹ spores / gram

Vol. / mass:

250 g

Registered by:

BASF South Africa (Pty) Ltd.

Co. Reg. No. 66/10235/07

P.O.Box 2801

Halfway House 1685 / Halfway House 1685

EMERGENCY NUMBER / NOODNOMMER: +27 (0)31 769 2003

Geregistreer deur:

BASF Suid Afrika (Mpy) Bpk.

Mpy Reg. Nr 66/10235/07

Posbus 2801

Halfway House 1685

Approval code: 28 / 03 / 2014

Batch Number / Lotnommer and

Date manufactured / Datum vervaardig

™Trade Mark of BASF:
Handelsmerk van BASF

AW-06 ZA1064



**CAUTION
VERSIGTIG**





CAUTION

WARNINGS

- Can cause slight eye irritations.
- Can cause allergic reactions in sensitive persons.
- Asthmatic persons should not handle dry product.
- Store away from food and feed stuffs.
- The active ingredient of **TrichoPlus™** is a living organism. The formulated product contains viable spores. With time and excessive temperatures these spores, like most biological organisms, become less viable leading to reduced efficacy.
- For best results **TrichoPlus™** must be stored in a cold room at 4 °C.
- Spore viability is maintained at 4 °C.
- During storage, and when in transit, it is important to keep the cold chain intact.
- Keep out of reach of children, uninformed persons and animals.
- Potency of **TrichoPlus™** is reduced when applied to soils containing high residue levels of fungicides (e.g. copper, mancozeb, captab, metiram, benomyl and pentachloronitrobenzene).
- Do not leave the powder or mixture standing in the sun.

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 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 animals; the 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 registration. Please consult the supplier in the event of any uncertainty.

PRECAUTIONS

- Wear face protection whilst working with dry product.
- Avoid direct contact with eyes. In case of accidental contact immediately flush eyes with clean water.
- Do not inhale product dust or spray mist.
- Do not eat, drink or smoke whilst mixing or applying.
- Wash hands with soap and cold water after application.
- Prevent contamination of food, foodstuffs, drinking water and eating utensils.
- Clean applicator before and after use. Spray mixture left in the applicator for extended periods may lead to fungal growth that may cause blockages. Do not contaminate other crops, grazing, rivers, dams and as not under treatment with wash water.



- Rinse empty container three times with a volume of water equal to minimum of 10 % of that of the container. Add the rinsings to the contents of the spray or mixing tank.
- Do not use empty containers for any other purpose.
- Use as soon as possible after sealed bottle is opened.
- Use before expiry date indicated on label.
- Ensure good irrigation management practices.

DIRECTIONS FOR USE:

USE ONLY AS DIRECTED

Compatibility:

The active ingredient of **TrichoPlus™** is a living organism and it is not advisable to mix this in the tank with commercially used pesticides, unless recommended.

MIXING INSTRUCTIONS

For larger area treatment:

- One bottle **TrichoPlus™** (250 g) suspended in 1000 ℓ of water will treat 10 000 m² (1 hectare) or 3000 speedling trays.
- Measure the required quantity of powder into a suitable container.
- Add sufficient water to obtain a suspension.
- Mix the suspension thoroughly and allow to stand for 20 minutes.

- **TrichoPlus™** is mixed at a ratio of 1 part **TrichoPlus™** to 4 parts water (1:4 m/v) to obtain the final recommended concentration of 250 g powder in 1000 ℓ of water.
- Apply as recommended.

For smaller area treatment:

- One level 5 ml medicine spoon (equivalent of ca. 1,5 g product) suspended in 6 ℓ of water will treat 6 m² seedbed area or 18 speedling trays.
- Add the correct amount of spoons necessary to enough water to obtain a suspension concentrate.
- Mix the concentrate thoroughly and allow to stand for approximately 20 minutes.
- Dilute this concentrate to obtain the final concentration of 6 ℓ water / spoon.
- The dilution ratio (1:3 m/v) will always be 1 spoon of product to 6 ℓ of water.
- Apply as recommended.

In programme applications **TrichoPlus™** is compatible with the following pesticides:

Fungicides

fosetyl-Al
metalaxyl
propamocarb

Insecticides

imidacloprid
fipronil

Nematicides

fenamiphos
fosthiazate
furfural
cadusafos
oxamyl





APPLICATION METHODS

Application by hand:

- Pre-mix product as described and apply to relevant crop as a drench.
- Apply as a drench to seedling trays or seedbeds after planting.
- Apply at a rate of 1 l / 3 seedling trays (128 planting holes) or 1 m² seedbed area.
- For dispensing the correct dosage to plants use watering cans or cups, etc.

Application through commercial spray equipment:

- Pre-irrigate the area to be treated to ensure moist conditions.
- Pre-mix product as described.
- Fill the spray tank with half the required water volume and start agitator mechanism.
- Add the required pre-mix suspension to the spray tank and top up to final water volume.
- Apply as a high volume application at a rate of 1000 - 1500 l spray mixture / ha.
- Irrigate 15 - 20 mm directly after application, to wash the product into the root zone.

Application through irrigation system:

- Mix product as described and apply to relevant crop through the irrigation system, e.g. drip- and micro irrigation, overhead sprinklers and pivots.
- The suspension will pass through a 100 micron or larger filter, but must be applied after the sand filter.
- Ensure that filters are clean and that the drippers or micro's are functional before treatment.
- Pre-irrigate the area to be treated, to ensure moist conditions.

- The mixture should be diluted with sufficient water and allow at least 40 minutes for even distribution of the product through the irrigation system.
- Irrigate 15 - 20 mm directly after application to wash the product into the root zone.

Application as a seed treatment:

- For every 100 Kg seed to be treated, add 125 g **TrichoPlus™** to the required volume of water.
- Add a suitable sticker, e.g. CMC-Carboxy Methyl Cellulose to the required volume of water, just enough to ensure good coverage of the total seed surface.
- Add the resultant suspension to the seed. Use just enough of the liquid suspension, to dampen the seed surface.
- Plant seed as normal.
- Do not apply **TrichoPlus™** to seeds treated with a fungicide, unless recommended.

IMPORTANT POINTS TO REMEMBER

- The **TrichoPlus™** mixture must be stirred continuously for the fungal spores to remain in suspension.
- It is important to irrigate before and after application to create favourable conditions for fungal growth.
- Mixed volumes must be applied the same day and not left overnight or standing in the sun.
- **Mixed volumes must be applied after the sand filter if applied through an irrigation system.**
- Do not apply incompatible fungicides within 2 weeks prior to, or 4 weeks after application of **TrichoPlus™**, unless recommended.
- There is no withholding period after treatment and crops can be harvested or used at any stage after treatment.



REGISTERED USAGES

SEED TREATMENT

Rate:

125 g of **TrichoPlus™** / 100 kg seed to be treated added to the water sticker mixture.

Application timing and Intervals:

Apply as a seed treatment before plant.

Application guidelines:

- For every 100 Kg seed to be treated, add 125 g **TrichoPlus™** to the required volume of water.
- Add a suitable sticker, e.g. CMC-Carboxy Methyl Cellulose to the required volume of water, just enough to ensure good coverage of the total seed surface.
- Add the resultant suspension to the seed. Use just enough of the liquid suspension to dampen the seed surface.
- Pant seed as normal.
- Do not apply **TrichoPlus™** to seeds treated with a fungicide, unless recommended.

SEEDLINGS / SPEEDLINGS

Rate:

Mix 25 g of **TrichoPlus™** powder with 100 ℓ of water.

Application timing and Intervals:

Apply as a drench treatment to seedling trays or seedbeds after planting. Re-apply as a drench treatment 3 - 4 weeks after the first treatment. The number of **TrichoPlus™** applications is determined by the growing period of the relevant seedling.

Application guidelines:

Apply as a drench treatment at a rate of 1 ℓ / 3 speedling trays (128 planting holes) or 1 m² seedbed area.

Protected crops (tunnels, glasshouses and shade nets):

Rate:

Mix 25 g of **TrichoPlus™** powder with 100 ℓ of water.

Application timing and Intervals:

Always use **TrichoPlus™** preventively. Apply as a drench treatment on seedlings or speedlings. Re-apply as a drench treatment 3 - 4 weeks apart and follow this application interval during the growing period of the plant.



**Application guidelines:**

Apply as a drench treatment by hand or through the irrigation system.

TOBACCO SEEDBEDS / TRANSPLANTED TOBACCO**Tobacco seedbeds:****Rate:**

Mix 25 g of **TrichoPlus™** powder with 100 ℓ of water and apply 1 ℓ of this mixture / m².

Transplanted tobacco:

Add 0.0167 g of **TrichoPlus™** / plant hole in the planting water or apply 250 g of **TrichoPlus™** / ha. (planting density ca. 15000 x 0.017 g = 250 g **TrichoPlus™** / ha).

APPLICATION TIMING AND INTERVALS:**Tobacco seedbeds:**

Apply **TrichoPlus™** as a drench treatment upon sowing followed up with at least 2 applications, 3 weeks apart, within an IPM programme.

Transplanted tobacco:

Upon transplanting of the tobacco seedlings, add **TrichoPlus™** in the plant hole with water. Repeat application on weeks 3 and 6 post transplanting, as root drench treatments. **TrichoPlus™** should be combined with PI Plus at transplanting of seedlings, in order to provide a comprehensive root health solution, with resulting yield and quality increases.

Application guidelines:

TrichoPlus™ applications should be scheduled in an IPM programme, not to be adversely affected by fungicide applications, in this programme as recommended.

Tobacco seedbeds:

Drench applications in seedbeds can be done with watering cans, buckets or through irrigation.

Transplanted tobacco:

Add registered **TrichoPlus™** dosage in a volume of at least 30 mℓ to the water in the planting hole.





Alhoewel hierdie middel herhaaldelik getoets is onder ,n verskeidenheid van toestande, waarborg die registrasiehouer nie dat dit effektief sal wees onder alle omstandighede nie. Die reaksie en effek van Tricho Plus™ mag benadeel word deur faktore soos abnormale grond-, weers-, bergingsomstandighede, kwaliteit van die water waarmee die produk vermeng word, verenigbaarheid met middels wat nie gelys is nie, sowel as deur die metode, tyd en die akkuraatheid van toediening. Die registrasiehouer aanvaar ook nie aanspreeklikheid vir skade aan oeste, plantegroei, die omgewing, of leed aan enige persone of diere nie, swak prestasie van die middel, weens die feit dat die gebruiker in gebreke gebly het om die aanwysings te volg, of die ontstaan van toestande wat nie voorsien kon word, in terme van registrasie nie. Indien u onseker is oor die aanwysings of toediening van Tricho Plus™, raadpleeg asseblief u verskaffer.

VOORSORGMAATREËLS

- Gebruik ,n gesigmasker met die hantering van die droë produk.
- Voorkom direkte kontak met oë. In geval van toevallige kontak, spoel onmiddellik met skoon water.
- Moenie die poeierstuif of spuitnewel inasem nie.
- Moenie eet, drink of rook tydens vermenging of toediening nie.
- Was hande met seep en koue water na toediening.
- Voorkom kontaminasie van voedsel, voer, drinkwater en eetgerei.

MENGINSTRUKSIES

Vir behandeling van groter areas:

- Een bottel **TrichoPlus™** (250 g) gesuspendeer in 1000 ℓ water, word aanbeveel vir die behandeling van 10 000 m² (1 hektaar) of 3000 saailinglaaitjies.
- Voeg die verlangde hoeveelheid poeier, in ,n geskikte houer.
- Voeg genoeg water by, om ,n suspensie te verkry.
- Meng die suspensiekonsentraat deeglik en laat staan vir ongeveer 20 minute.
- **TrichoPlus™** word gemeng in ,n verhouding van een deel **TrichoPlus™** met 4 dele water (1:4 m/v) om die finale aanbevole konsentrasie van 250 g poeier in 1000 ℓ water te verkry.
- Dien toe soos aanbeveel.

Vir behandeling van kleiner areas:

- Een 5 mℓ gelykvol medisynlepel (ekwivalent van ca. 1,5 g produk) gesuspendeer in 6 ℓ water, sal 6 m² saadbedarea of 18 saailinglaaitjies kan behandel.
- Voeg die regte aantal lepels by genoeg water soos nodig, om ,n suspensiekonsentraat te verkry.
- Meng die konsentraat deeglik en laat staan vir ongeveer 20 minute.
- Verdun die konsentraat, om die finale konsentrasie van 6 ℓ water / lepel te verkry.
- Die verdunningsverhouding (1:3 m/v) sal altyd 1 lepel produk per 6 ℓ water wees.
- Dien toe soos aanbeveel.





Toediening deur kommersiële spuittoerusting:

- Besproei area wat behandel gaan word vooraf, om klam toestande te verseker.
- Meng die produk vooraf, soos beskryf.
- Vul die spuittenk met die helfte van die benodigde watervolume en skakel die roermeganisme aan.
- Voeg die benodigde voorafgemengde produk in die spuittenk en vul tot die finale watervolume.
- Dien as ,n hoëvolume bespuiting toe, teen 1000 - 1500 l spuitmengsel / ha.
- Besproei 15 - 20 mm direk na toediening, om die produk in die wortelsone in te was.

Toediening deur besproeiingsstelsels:

- Meng produk soos voorgeskryf en dien toe op die betrokke gewas, deur die besproeiingstelsel, bv. drup-, mikro-, pivot- en sprinkelbesproeiing.
- Die suspensie sal deur ,n 100 mikron, of groter sif beweeg, maar moet ná die sandfilter toegedien word.
- Verseker dat die siwwe skoon is en dat die druppers of mikro's goed funksioneer, voor toediening.
- Besproei die area wat behandel gaan word vooraf, om klam toestande te verseker.
- Die mengsel moet verdun word met voldoende water en oor ,n tydperk van ten minste 40 minute toegedien word om eweredige verspreiding van die produk deur die besproeiingstelsel te verseker
- Besproei 15 - 20 mm direk na toediening om die produk in die wortelsone in te was.

Toediening as saadbehandeling:

- Voeg 125 g **TrichoPlus™** vir elke 100 Kg saad wat behandel moet word, by die korrekte watervolume.
- Voeg ,n geskikte kleefmiddel, bv. CMC-Carboxy Methyl Cellulose, by die verlangde watervolume. Gebruik net genoeg suspensie om goeie bedekking van die saadoppervlak te verseker.

GEREGISTREERDE GEBRUIKE

SAADBEHANDELING

Dosis:

Dien 125 g **TrichoPlus™** / 100 Kg saad, met die waterkleefmiddelmengsel.

Toedieningstye en intervalle:

Dien as ,n saadbehandeling, voor plant toe.

Toedieningsriglyne:

- Voeg 125 g **TrichoPlus™** vir elke 100 Kg saad wat behandel moet word, by die korrekte watervolume.
- Voeg ,n geskikte kleefmiddel, bv. CMC-Carboxy Methyl Cellulose, by die verlangde watervolume. Gebruik net genoeg suspensie om goeie bedekking van die saadoppervlak te verseker.
- Voeg die finale suspensie by die saad. Gebruik net genoeg vloeistofsuspensie, om die saadoppervlakke aan te klam.
- Plant saad soos gewoonlik.
- Moenie saad behandel met **TrichoPlus™** indien reeds behandel is met ,n swamdoder nie, tensy so aanbeveel.



**Toedieningsriglyne:**

Dien as ,n deurdrenking per hand toe, of deur die besproeiingstelsel.

TABAKSAADBEDDINGS / UITGEPLANTE TABAK**Tabak saadbeddings:****Dosis:**

Meng 25 g **TrichoPlus™** poeier met 100 ℓ water en dien 1 ℓ van die mengsel / m².

Uitgeplante tabak:

Gebruik 0.0167 g **TrichoPlus™** / plantgat in die plantwater, of dien 250 g **TrichoPlus™** / ha toe. (plantdigtheid ca.15000 x 0.017 g = 250 g **TrichoPlus™** / ha).

TOEDIENINGSTYE EN INTERVALLE**Tabaksaadbeddings:**

Dien **TrichoPlus™** toe as ,n deurdrenking met saai en volg op met ten minste 2 behandelings, met 3 weke intervalle, in ,n GPB (IPM) program.



The Chemical Company

TrichoPlus™

Reg. No.: L7161

Act No. 36 of 1947

Reg. Nr: L7161

Wet Nr 36 van 1947

For full particulars see enclosed pamphlet

Vir volle besonderhede verwys na ingeslote pamflet

A fungal inoculant for the control of crop root diseases and for enhanced plant growth.

,n Swaminokulant vir die beheer van wortelsiektes van gewasse en vir verbeterde plantegroei.

Active ingredient:

Aktiewe bestanddeel:

Trichoderma fertile (strain JM41R)
2 x 10⁹ spores / gram

Vol. / mass:

250 g

Registered by:

BASF South Africa (Pty) Ltd.

Co. Reg. No. 66/10235/07

P.O.Box 2801

Halfway House 1685 / Halfway House 1685

EMERGENCY NUMBER / NOODNOMMER: +27 (0)31 769 2003

Geregistreer deur:

BASF Suid Afrika (Mpy) Bpk.

Mpy Reg. Nr 66/10235/07

Posbus 2801

Halfway House 1685

Approval code: 28 / 03 / 2014

Batch Number / Lotnommer and

Date manufactured / Datum vervaardig

™Trade Mark of BASF:
Handelsmerk van BASF

AW-06 ZA1064



**CAUTION
VERSIGTIG**

