

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

**Read the label carefully before opening**

# HERBIFUME<sup>®</sup> 510 SL

Botswana: Reg. No. W130317, Act No. / Wet Nr. 18 of / van 1999

A soil fumigant for the control of certain soil fungi, nematodes and germinating weed seeds in agricultural and horticultural soils, seedbeds and planting media as indicated. Also used for the establishment of apple and pear trees in replant orchards.

'n Grondberokingsmiddel vir die beheer van sekere grondswamme, aalwurms en ontkiemende onkruidsaad in saadbeddings, in landbou- en tuinbougronde en plantmedia soos aangedui. Word ook gebruik vir die vestiging van appel- en peerbome in herplant boorde.

## HERBICIDE GROUP CODE

## Z ONKRUIDDODERGROEPKODE

### ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL:

Metam-sodium (Thiocarbamate) ..... 510 g/l

Metam natrium (Tiokarbamaat) ..... 510 g/l

Net Volume

ℓ

Netto Volume



### REGISTRATION HOLDER / REGISTRASIEHOUER:

**Nulandis<sup>®</sup> (A division of AECL Limited)/ Nulandis<sup>®</sup> ('n Afdeling van AECL 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

**HERBIFUME<sup>®</sup>** is the registered trademark of AECL Limited (Nulandis<sup>®</sup> a division of AECL Limited)/ is die geregistreerde handelsmerk van AECL Beperk (Nulandis<sup>®</sup> 'n afdeling van AECL Beperk)

**Batch No:**

**Date of Manufacture:**

**Lotnommer:**

**Datum van Vervaardiging:**

UN number: 3267 – Corrosive liquid, basic, organic, n.o.s.

YELLOW BAND



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|                             |
|-----------------------------|
| HERBICIDE GROUP CODE      Z |
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**HARMFUL**

**WARNINGS:**

**DO NOT USE IN CONFINED AREAS WITHOUT ADEQUATE VENTILATION OR WHERE FUMES MAY PENETRATE ADJOINING PREMISES WITH GROWING PLANTS. DO NOT TREAT WITHIN 5 METRES OF EXISTING TREES AND FIELD CROPS.**

**DO NOT USE IN GREENHOUSE WHERE DESIRABLE PLANTS ARE PRESENT.**

Harmful when inhaled or swallowed.

May cause skin, eye, nose and throat irritation.

Handle with care and close container properly after use.

Toxic to fish and other animals.

Leave the area immediately after the soil has been treated.

Store away from food, feed and seeds.

Keep out of reach of children, uninformed persons and animals.

Re-entry: Do not enter treated area within 1 day after treatment unless wearing protective clothing.

In case of poisoning – CALL A DOCTOR AND MAKE THIS LABEL AVAILABLE TO HIM.

**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 WEEDS, PESTS OR 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 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.

Use rubber boots and gloves and face shield when handling the product.

Use a respirator when working in a confined area. Ventilate confined area thoroughly during use.

Wash immediately with water after accidental skin contact. Use a soothing ointment such as petroleum jelly should severe skin irritation occur.

Do not eat, drink or smoke whilst using or before washing hands and face and changing clothes.

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

Corrosive - clean spray apparatus thoroughly after use and dispose of wash water in a safe manner.

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 perforation and flattening and dispose of it in a safe way. Do not use the container for any other purpose.

#### **SYMPTOMS OF POISONING:**

Skin and eye irritant. Skin irritation is characterised by itching, scaling, reddening or blistering. May cause irritation to the respiratory tract.

#### **FIRST AID TREATMENT:**

|               |                                                                                                                                                                                                                                                 |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IF INGESTED:  | When swallowed, DO NOT INDUCE VOMITING unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately. |
| INHALATION:   | Remove, patient to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.                                                                                         |
| SKIN CONTACT: | Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.                                                                                                     |
| EYE CONTACT:  | Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.                                                    |

#### **NOTE TO PHYSICIAN:**

No specific antidote is known. Treat symptomatically.

#### **RESISTANCE WARNING:**

For resistance management, **HERBIFUME 510 SL** is group code Z herbicide. Any weed population may contain individuals naturally resistant to **HERBIFUME 510 SL** and other group code Z herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. The resistant weeds may not be controlled by **HERBIFUME 510 SL** or any other group code Z herbicide.

To delay herbicide resistance:

- Avoid exclusive repeated use of herbicides from the same group codes. Alternate or tank mix with registered products from different herbicide group codes.
- Integrate other control methods (chemical, cultural, biological) into weed control programmes.

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

#### **DIRECTIONS FOR USE:** USE ONLY AS INDICATED

**HERBIFUME 510 SL** is a water miscible soil fumigant and can be easily applied by drenching infected soils.

Do not apply **HERBIFUME 510 SL** when soil temperatures are below 10 °C. For optimal efficacy, apply when soil temperatures are between 10 and 25 °C. Sub-optimal efficacy of **HERBIFUME 510 SL** may occur on turf soils due to insufficient water penetration and soils with high organic matter content (high absorption coefficient).

#### **PRE-APPLICATION PROCEDURE:**

Prepare the soil up to a depth of 50 cm to ensure a well-prepared, fine tilth surface. Remove un-decayed plant material.

Bring soil moisture up to just below field capacity (60 - 80%), 2-3 weeks prior to application. Keep soil moist prior to application.

## **POST APPLICATION PROCEDURE:**

To prevent excessive evaporation from treated areas, seal treated areas with either (i) follow-up irrigation or (ii) plastic sheet.

Aerate treated area thoroughly 10-14 days after application by cultivating soil.

Soil temperatures influence the evaporation rate of the fumigant:

Temperatures of 10-15 °C plant or sow 3-4 weeks after application.

Temperatures of + 16 °C, plant or sow 2-3 weeks after application.

Soils with a (i) high clay content, (ii) high organic fraction or those that are saturated, will retain the fumigant and require a longer waiting period.

## **ENSURE THAT THE TREATED AREA IS READY FOR USE BY CONDUCTING A GERMINATION TEST.**

### **GERMINATION TEST:**

Take soil samples from both fumigated and untreated areas at depths of 10 cm and 15cm. Remove and discard top surface soil. Half fill transparent container with the soil and close immediately.

Place cress seeds on moist filter paper or cotton pads and place on top of soil in container. Close container and place near a window at room temperature.

Check 24-48 hours later for germination. Only if seeds have germinated on both untreated as well as fumigated soils, is the area ready for use.

Prevent re-infestation of treated soil by using clean uninfected plant material, irrigation water and equipment.

## **APPLICATION METHODS:**

### **SPRINKLER SYSTEM:**

Inject the required amount of **HERBIFUME 510 SL** into the system via a tank mix. Application should be directly from the hydrant using a non-return valve. Ensure injection of **HERBIFUME 510 SL** occurs over the full irrigation period. Only apply under conditions that ensure even distribution over treated area. Careful supervision is essential.

Keep treated area moist by applying follow-up irrigation for one week after treatment.

On light sandy soils (<5% clay) where surface sealing with follow-up irrigation is difficult to obtain and sub-optimal efficacy may result, the use of plastic sheeting is recommended.

**Refer to “Post Application Procedure”.**

### **SEEDBEDS:**

Seedbeds and small surfaces can best be treated by means of a watering can. Make up seedbeds prior to treatment. Drench the soil thoroughly with the required amount of **HERBIFUME 510 SL** in a minimum of 10 l water per 10 m<sup>2</sup>.

**Preferably treat the total area to minimise contamination from untreated areas. Adhere strictly to directions for use on soil preparation.**

To obtain optimum efficacy, the treated area surface must be sealed to prevent the gas from escaping either by:

- i) Drench - with a further irrigation (4-5 mm water/ha). Keep area moist with follow-up irrigation for one week after treatment.
- ii) Cover - with a plastic sheet. The cover need not be tented. Remove cover after three days.

**Refer to “Post Application Procedure”.**

### **PLANTING HOLE TREATMENT:**

Prepare a dam around plant hole ( $\pm$  1 m x 1 m) with a wall of 10 cm in height. Half fill the dam with water and then apply required amount of **HERBIFUME 510 SL** over the surface. Fill up immediately to full capacity with water.

**Refer to “Pre application procedure”.**

### SPECIALIZED APPLICATION:

For the successful establishment of maiden apple and pear trees, in replant orchards.

Fumigation must be completed by April/May before the winter rains.

Withholding period: See above "Germination Test".

Cut the top 30-40 cm off an open 200 l drum. Prepare a dam by securing the drum into the ground at the planting hole position. Add **HERBIFUME 510 SL** at an application rate of 100 ml / 20 l water. Allow the mixture to penetrate the soil. The treated soil must be placed on a plastic sheet, or similar, when the hole is dug, in order to prevent contamination of the soil, before replacing it into the planting hole.

### GROWING MEDIA AND POTTING SOIL:

Media should be moistened with **HERBIFUME 510 SL** solution using a watering can whilst mixing continuously. The use of a cement mixer is ideal for this purpose.

Apply 700 - 900 ml **HERBIFUME 510 SL** /m<sup>3</sup> soil, in 30 - 50 l water.

Cover treated soil with a plastic sheet to prevent gases from escaping. Remove cover after three days and aerate.

Refer to "Post application procedure".

### APPLICATION TABLE:

| DOSAGE RATE                                                                                                               | CONTROL SPECTRUM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 650 - 900 l per ha<br><br>(65 - 90 ml per m <sup>2</sup> )<br>Rate is dependent on infestation level and target spectrum. | <b>SOIL FUNGI:</b><br>Damping off ( <i>Fusarium</i> , <i>Pythium</i> , <i>Rhizoctonia</i> spp.), Pink root ( <i>Pyrenochaeta terrestris</i> ), White Bulb rot ( <i>Sclerotium cepivorum</i> )<br><br><b>NEMATODES:</b><br>Root Knot ( <i>Meloidogyne</i> spp.), Lesion ( <i>Pratylenchus</i> spp.), Cyst ( <i>Heterodera</i> spp.), Stubby ( <i>Trichodorus</i> spp.).<br><br><b>WEEDS:</b><br><b><u>Broadleaf weeds:</u></b><br>Red garden sorrel ( <i>Oxalis latifolia</i> )<br>Chickweed ( <i>Stellaria media</i> ),<br>Khaki weed ( <i>Tagetes minuta</i> )<br>Perennial and Common Pigweed ( <i>Amaranthus deflexus</i> A. <i>hybridus</i> ),<br>Purslane ( <i>Portulaca oleracea</i> )<br>Shepherds purse ( <i>Capsella bursa-pastoris</i> )<br>Thorn apple ( <i>Datura</i> spp.).<br><b><u>Grasses:</u></b> - Annual grasses including Goose grass ( <i>Eleusine indica</i> => <i>Eleusine corocana</i> )<br>sweet Buffalo grass ( <i>Panicum schinzii</i> )<br>Yellow Nutsedge = Yellow Watergrass ( <i>Cyperus esculentus</i> ).<br><br><b>LAWNS AND TURF RENOVATION:</b><br>Common couch = Common quick grass ( <i>Cynodon dactylon</i> )<br>Kikuyu ( <i>Pennisetum clandestinum</i> ) |

FLUSHSOL® is a registered trademark of AECI Limited (Nulandis® a division of AECI Limited)



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|                                      |
|--------------------------------------|
| <b>ONKRUIDDODER GROEPKODE      Z</b> |
|--------------------------------------|

**AKTIEWE BESTANDDEEL:**

Metam natrium (Tiokarbamaat) ..... 510 g/l

**REGISTRASIEHOUER:**

Nulandis<sup>™</sup> ('n Afdeling van AECI Beperk)

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**SKADELIK**

**WAARSKUWINGS:**

**MOENIE IN BEPERKTE RUIMTE SONDER VOLDOENDE VENTILASIE, OF WAAR GASSE NA AANGRENSENDE GEBOUE MET LEWENDE PLANTE KAN DEURDRING, GEBRUIK NIE. TOEDIENINGS MOENIE NADER AS 5 METER VAN BESTAANDE BOME EN AKKERBOUGEWASSE GESKIED NIE. MOENIE GEBRUIK IN KWEEKHUISE WAAR GEWENSDE PLANTE GEKWEEK WORD NIE.**

Skadelik indien ingeasem of ingesluk word.

Mag irritasie van die vel, oë, neus en keel veroorsaak.

Hanteer versigtig en maak houer deeglik toe na gebruik.

Giftig vir visse en ander diere.

Verlaat die gebied onmiddellik nadat grond behandel is.

Berg weg van voedsel, voer en saad. Hou buite bereik van kinders, oningeligte persone en diere.

Herbetreding: Moenie behandelde gebied betree vir 1 dag na bespuiting nie, tensy beskermende oorklere gedra word. In geval van vergiftiging – ONTBIED 'N GENEESHEER EN STEL HIERDIE ETIKET AAN HOM BESKIKBAAR.

**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 ONKRUIDE, PLAAG OF SIEKTE TEEN DIE BETROKKE MIDDEL, SOWEL AS DIE METODE, TYD EN AKKURAAKTHEID 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.**

## **VOORSORGMATREËLS:**

Moenie dampe inasem nie. Dra rubberhandskoene-, skoene en gesigskerm tydens hantering van die produk.

Dra 'n gesigsmasker wanneer in 'n beperkte ruimte gewerk word.

Deurlug beperkte ruimte deeglik terwyl toediening plaasvind.

Was onmiddellik met water na toevallige velkontak. Gebruik 'n strelende salf soos petroleumjellie indien ernstige velirritasie ondervind word.

Moenie eet, rook of drink tydens toediening of voordat hande en gesig gewas en skoon klere aangetrek is nie.

Verhoed besoedeling van voedsel, voer, drinkwater en eetgerei.

Vretend - maak spuitapparaat deeglik skoon na gebruik en laat skoonmaak water veilig afloop.

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 vloeitot '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 plat te druk. Moenie die houer vir enige ander doel gebruik nie.

## **SIMPTOME VAN VERGIFTIGING:**

Mag vel- en oogirritasie veroorsaak. Velirritasie word gekenmerk deur jeukerigheid, afskilfering, rooiheid of blase. Mag irritasie van die asemhalingsstelsel veroorsaak.

## **NOODHULPBEHANDELING:**

|            |                                                                                                                                                                                                                                                           |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INGESLUK:  | Indien ingesluk, MOENIE BRAKING veroorsaak, tensy so aanbeveel deur mediese personeel. Moet nooit iets per mond aan 'n bewustelose persoon toedien nie. Maak styfpassende klere soos bv. kraag, das, belt of gordel los. Verkry onmiddellik mediese hulp. |
| INASEMING: | Verwyder die pasiënt na vars lug. Indien asemhaling bemoeilik word, gee suurstof. Indien ophou asemhaal, pas kunsmatige asemhaling toe. Verkry onmiddellik mediese hulp.                                                                                  |
| VELKONTAK: | Was met seep en water. Bedek die geïrriteerde vel met 'n sagte room. Verkry mediese hulp indien irritasie ontwikkel. Koue water mag gebruik word.                                                                                                         |
| OOGKONTAK: | Gaan na en verwyder enige kontaklense. In geval van kontak, spoel onmiddellik met genoegsame water vir minstens 15 minute. Koue water mag gebruik word. Verkry onmiddellik mediese hulp.                                                                  |

## **NOTA AAN GENEESHEER:**

Geen spesifieke teenmiddel. Behandel simptome.

## **WEERSTANDSWAARSKUWING:**

**HERBIFUME 510 SL** is 'n groepkode Z onkruidkiller. Enige populasie van 'n spesifieke onkruid spesie mag individueel insluit wat 'n natuurlike weerstand teen **HERBIFUME 510 SL** of enige ander groepkode Z onkruidkiller het. Indien hierdie onkruidkillers herhaaldelik aangewend word, kan die weerstandbiedende individueel uiteindelik die onkruidpopulasie oorheers. Hierdie weerstandbiedende onkruid sal waarskynlik nie deur **HERBIFUME 510 SL** of enige ander groepkode Z onkruidkillers beheer word nie.

Om weerstand teen onkruid te vertraag:

- Verminder die eksklusiewe herhaaldelike gebruik van onkruidkillers met dieselfde groepkode.
- Wissel af met, of gebruik tenkengsels van produkte in verskillende onkruidkiller-groepcodes.
- Integreer ander beheermaatreëls (chemie, verbouing, biologies) in onkruidbeheerprogramme.

Vir spesifieke inligting oor weerstandsbestuur kontak die registrasiehouer van hierdie produk.

## **GEBRUIKSAANWYSINGS: GEBRUIK SLEGS SOOS AANGEDUI**

**HERBIFUME 510 SL** is 'n watermengbare grondberokingsmiddel en kan maklik toegedien word deur besmette grond te deurweek. **HERBIFUME 510 SL** kan maklik deur middel van deurweking toegedien word op besmette grond. Moenie **HERBIFUME 510 SL** toedien wanneer grondtemperatuur laer as 10 °C is nie. Vir optimale doeltreffendheid dien toe by grondtemperatuur tussen 10 – 25 °C. Suboptimale doeltreffendheid kan voorkom op turfgrond a.g.v. swak penetrasie vermoë, sowel as gronde met 'n hoë organiese inhoud (hoë absorpsie vermoë).

### **VOOR TOEDIENING PROSEDURE:**

Maak grond tot 'n diepte van 50 cm deeglik los, breek kluite en maak oppervlakte gelyk. Verwyder onverrotte plantmateriaal.

Toediening moet onder goeie vogtoestande geskied dit wil sê, die grondvoggehalte moet sowat 60 - 80 % van veldkapasiteit wees 2 - 3 weke vóór toediening. Maak seker dat die grond nat bly vóór toediening.

### **NA TOEDIENING PROSEDURE:**

Om oormatige gasontsnapping te verhoed, verseël die grondoppervlakte van behandelde areas, deur (i) opvolg besproeiing of (ii) plastiekseile.

Bewerk grond deeglik om behandelde gebied, deur te belug 10-14 dae na behandeling.

Herhaal kort voor planttyd.

Grondtemperatuur beïnvloed die verdamping van die berokingsmiddel:

Temperatuur van 10 – 15°C, plant óf saai 3 - 4 weke na toediening.

Temperatuur van +16°C, plant óf saai 2 - 3 weke na toediening.

Gronde met 'n (i) hoë klei inhoud, (ii) hoë organiese gedeelte of dié wat versadig is, sal die berokingsmiddel langer behou, en sal gevolglik 'n langer wagperiode nodig hê.

## **VERSEKER DAT DIE BEHANDELDE AREA GEREED IS VIR GEBRUIK DEUR MIDDEL VAN DIE ONTKIEMINGSTOETS.**

### **ONTKIEMINGSTOETS:**

Neem grondmonsters van berookte en onberookte gebiede tot 'n diepte van 10 cm en 15 cm. Verwyder die boonste laag grond. Maak 'n deursigtige houer halfvol met grond en maak dit onmiddellik toe.

Plaas breivrag saad op nat filtreerpapier of watte en sit dit bo-op die grond in die houer. Maak die houer toe en plaas dit naby 'n venster by kamertemperatuur.

Kyk 24 - 48 ure later vir ontkieming. Indien saad by beide die onbehandelde en berookte grond ontkiem het, is die gebied gereed vir gebruik.

Vermý herbesmetting van behandelde grond deur skoon plantmateriaal, besproeiingswater en toerusting te gebruik.

### **TOEDIENINGSMETODES:**

#### **SPRINKELSTESISTEME:**

Spruit die gewenste hoeveelheid **HERBIFUME 510 SL** deur middel van 'n mengtenk in die sisteem in. Verseker dat **HERBIFUME 510 SL** toevoer gedurende die volle besproeiingsperiode plaasvind, en dat eweredige verspreiding verkry word. Toediening mag net direk van 'n hidrant, en met die gebruik van 'n eenrigtingklep geskied. Noukeurige toesig gedurende die hele toedieningsperiode is 'n vereiste. Hou behandelde gebied nat met 'n opvolgbesproeiing vir een week na behandeling. Dit word aanbeveel dat 'n plastiekseil oor ligte sanderige grond (<5% klei) gegooi word, aangesien oppervlak verseëling moeilik behaal word met opvolgbesproeiings en dit kan lei tot suboptimale effektiwiteit.

**Verwys na “Na toediening prosedure”.**

### SAADBEDDINGS:

Saadbeddings en klein oppervlakte kan met 'n gieter behandel word. Maak die saadbedding vóór behandeling. Deurweek die grond deeglik met die aanbevole hoeveelheid **HERBIFUME 510 SL** in 'n minimum van 10 l water per 10 m<sup>2</sup>.

**Verkieslik moet die totale gebied behandel word om sodoende besoedeling na onbehandelde gebiede, te beperk.**

**Hou streng by die gebruiksaanwysings vir grondvoorbereiding.**

Om optimale effektiwiteit te verkry moet die behandelde gebied verseël word, om ontsnapping van gas te verhoed, deur:

- i) Deurweking - met 'n verdere besproeiing (4 - 5 mm/ha). Hou gebied vogtig deur opvolgbesproeiing vir een week na behandeling.
- ii) Bedek – met 'n plastiekseil. Dit is onnodig om die oortrekseil vas te pen. Verwyder die oortrekseil na 3 dae.

**Verwys na “ Na toediening prosedure”**

### PLANTGAT BEHANDELING:

Berei 'n dam van ( ±1 m x 1 m) rondom die plantgat voor met 'n wal van 10 cm in hoogte. Vul die dam half met water en dien die aanbevole hoeveelheid **HERBIFUME 510 SL** oor die oppervlak toe. Vul dadelik aan met water tot volle kapasiteit.

**Verwys na “Voor toediening prosedure”.**

**GESPESIALISEERDE TOEDIENING:** Vir die suksesvolle vestiging van jong appel- en peerbome in herplant boorde.

Beroking moet teen April/Mei reeds voltooi wees, vóór aanvang van winterreën. Onthoudingsperiode: Verwys na bogenoemde “Ontkiemingstoets”

Sny die boonste 30-40 cm af van 'n oop 200 l drom. Berei 'n dam voor deur die afgesnyde deel stewig in die grond, waar die plantgat gemaak gaan word, te plaas. Voeg **HERBIFUME 510 SL** teen 'n dosis van 100 ml/20 l water by. Laat toe dat die mengsel in die grond in penetreer. Behandelde grond moet, wanneer gat gegrawe word, op 'n plastiekseil, of iets soortgelyks geplaas word om kontaminasie te vermy, vóór terugplasing in die plantgat.

### PLANT MEDIA EN POTGROND:

Plantmedia moet klam gemaak word met die **HERBIFUME 510 SL** oplossing, met behulp van 'n gieter deur voortdurende vermenging. Die maklikste metode is om 'n sementmenger te gebruik. Gebruik 700 - 900 ml **HERBIFUME 510 SL**/m<sup>3</sup> grond, in 30 - 50 l water. Bedek behandelde grond met 'n plastiekseil om te verhoed dat die gas ontsnap. Verwyder die oortrekseil na 3 dae en deurlug die grond.

**Verwys “Na toediening prosedure”.**

TOEDIENINGSTABEL:

| DOSIS                                                                                                                          | BEHEER SPEKTRUM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 650 - 900 l per ha<br><br>(65 - 90 ml per m <sup>2</sup> )<br>Hoeveelheid sal afhang<br>van infeksiedruk en<br>teiken spektrum | <b>GROND SWAMME:</b><br>Verwelksiekte ( <i>Fusarium</i> , <i>Pythium</i> , <i>Rhizoctonia</i> spp.)<br>Pienkwortel ( <i>Pyrenochaeta terrestris</i> )<br>Witbolvrot ( <i>Sclerotium cepivorum</i> )<br><br><b>AALWURMS:</b><br>Knopwortel ( <i>Meloidogyne</i> spp.)<br>Letsel ( <i>Pratylenchus</i> spp.)<br>Sist ( <i>Heterodera</i> spp.)<br>Stomp ( <i>Trichodorus</i> spp.)<br><br><b>ONKRUIDE:</b><br><b><u>Breëblaaronkruid:</u></b><br>Rooituinsuring ( <i>Oxalis latifolia</i> )<br>Sterremuur ( <i>Stellaria media</i> )<br>Kakiebos ( <i>Tagetes minuta</i> )<br>Meerjarige en gewone misbredie ( <i>Amaranthus deflexus</i> , <i>A. hybridus</i> )<br>Porslein( <i>Portulaca oleracea</i> )<br>Herderstassie ( <i>Capsella bursa-pastoris</i> )<br>Stinkblaar ( <i>Datura</i> spp.)<br><b><u>Grasse:</u></b> - Eenjarige grasse insluitende<br>Jongosgras ( <i>Eleusine indica</i> => <i>Eleusine corocana</i> )<br>Soet buffelsgras ( <i>Panicum schinzii</i> )<br>Geeluintjie ( <i>Cyperus esculentus</i> )<br><br><b>GRASPERKE EN HERVESTIGING VAN TURFBANE:</b><br>Gewone kweek ( <i>Cynodon dactylon</i> )<br>Kikoejoe ( <i>Pennisetum clandestinum</i> ) |

FLUSHSOL® is die geregistreerde handelsmerk van AECI Beperk (Nulandis® 'n afdeling van AECI Beperk