



Developed & Registered by: Natrol CC
Reg No 2010/077556/23

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Reg No 2004/102938/23

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Reg. No: L 0000 Act No. 36 of 1947 / WET Nr. 36 van 1947

A water soluble liquid systemic fungicide for the control of
Phytophthora root and collar rot in citrus, *Phytophthora* root and
base rot in pineapples and downy mildew in grapes. Also stimulates
plant's natural defenses against some of the mentioned diseases.

'n Wateroplosbare, vloeibare sistemiese swamdoder vir die beheer van
Phytophthora wortel- en kraagverrotting in sitrus, *Phytophthora*
wortel- en basisverrotting in pynappels en donsige skimmel in druiwe.
Stimuleer ook die plant se natuurlike beskermingsreaksies teen sommige
van die genoemde siektes.

Active Ingredient/Aktiewe Bestanddeel
Potassium phosphite / kaliumfosfiet 560g/l
(Phosphorus acid equivalent / Fosforsuur ekwivalent) 400g/l

Caution/Versigtig



SPECIMEN

Batch No./Lot Nr.

Date of Manufacture / Datum van Vervaardiging

For information to address your unique needs,
go to www.mbfi.co.za

25L

BICHEMSB001
SBF 25L



Bio-Chem SBF

Reg. No. L 0000 ACT No. 36 of 1947 / WET Nr. 36 van 1947

A water soluble liquid systemic fungicide for the control of diseases as indicated. also stimulates plant's natural defense reactions against some of the mentioned diseases.

Active Ingredient:

Potassium phosphite 560 g/l, (Phosphorus acid equivalent 400 g/l)
Net volume: 25 L

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CAUTION



**STORE AT ROOM TEMPERATURE. KEEP OUT OF DIRECT SUNLIGHT.
KEEP CONTAINER CLOSED WHEN NOT IN USE.**

WARNINGS

Withholding period – Minimum period that must lapse between last application and harvest of crop for food or feed:

Citrus and potatoes: 14 days

Grapes: 28 days

Do not apply within 21 days before or after copper application.

- Handle with care.
- Poisonous when swallowed.
- Irritation to eyes, skin and respiratory system.
- SBF SL must only be applied to actively growing plants.
- Plants to be treated should not suffer from any stress such as drought or heat, and must be actively growing citrus trees and vines not under stress, as this could lead to a phytotoxic response such as gummosis and leaf scorch.
- SBF SL may still be corrosive to metal, despite neutralization, so apply form plastic or fibreglass containers.
- Store in a cool and dry place, away from food and feed stuffs.
- Keep out of reach of children, uninformed persons and animals.
- Resistance: Similar to most other systemic fungicides, SBF SL is also subject to the selection of less susceptible fungal races and the development of less sensitive fungal pathogen populations. It is therefore highly advisable to alternate SBF SL with other non-related fungicides.

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 pest against the remedy concerned as well as by the method, time and accuracy of application. Furthermore the registration holder, 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 spray mist.

Wear rubber gloves and face shields when handling, mixing and application.

Do not eat, drink or smoke whilst mixing or applying.

Wash with soap and cold water after application or skin contamination.

Wash any contaminated clothing after application.

Invert the empty container for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse empty container three times with a volume of water equal to a minimum of 10 % of that of the container. Add the rinsing to the contents of the spray tank before destroying the container by perforation, flattening and burying.

When using SBF SL as a foliar application, rinse empty containers three times with a volume of water equal to at least one tenth of the volume of the container and add the rinsing to the rest of the spray water. Ensure that the recommended dosage is maintained.

When using SBF SL as a trunk application, rinse empty container thoroughly and destroy container by perforation and flattening. Dispose of the waste rinsing water by not contaminating crops, grazing or dams.

Do not use container for any other purpose.

While spraying, avoid contact with the spray as much as possible. Prevent spray drift onto other crops, grazing, rivers, dams and areas not under treatment.

Clean spray equipment and mixing containers thoroughly after use and dispose of wash water where it will not contaminate crops, grazing, rivers and dams.

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

DIRECTIONS FOR USE:

Use only as indicated

Compatibility:

The compatibility of SBF SL with other materials in terms of safety and biological efficacy still has to be confirmed.

Do not apply within 21 days before or after a copper application.

Do not mix SBF SL with highly alkaline material, eg. lime sulphur and Bordeaux mixture.

It is advisable to do a miscibility test prior to mixing SBF SL with other chemicals.

Tree / Plant condition:

Avoid application when trees / plants are under stress as result of drought, heat or water logging as this may result in poor control and / or phytotoxic effects.

Mixing for spraying:

Keep instructions under Compatibility in mind. Fill the tank to half capacity with clean, high quality water while agitating and then add SBF SL, and then the rest of the water. Do not leave spray mixture in the tank overnight, after finish application. SBF SL is totally water soluble and should be added first and mixed thoroughly before the addition of other products. The wetter should be added last.

Crop	Disease	Maximum rate per ha	Remark
Citrus	Phytophthora root rot	3,5 – 7 l SBF SL	<p>Foliar application:</p> <p>Apply as a light cover spray as determined by tree row volume, until early March. Repeat every 8 weeks. Sprays should be applied when trees are in high turgidity to avoid leaf burn. Do not apply when trees are flushing. Delay application until the new flush begins to harden off.</p> <p>Trunk application:</p> <p>Dilute SBF SL in a 1:1 ratio with water in a plastic container. Apply with a paint brush around the trunk from soil level to 35 cm upwards. The product will perform better on clean trunks. The addition of a wetter to the mixture will improve wetting of the trunk, uptake and translocation. In case of graft incompatibility, only treat above the graft joint. Applications should commence just after first rains of the season and repeated at bi-monthly intervals during rainy season. To enhance translocation after application to citrus roots via the phloem, avoid treatment when trees are in full flush. Rather postpone treatment to when new flush starts to harden off.</p>

Crop	Disease	Maximum rate per ha	Remark
Table & Wine grapes	Dowry mildew (<i>Plasmopara viticola</i>)	5 l SBF SL + 1.8 kg Mancozeb 800 WP	Start preventative application at 10 cm shoot length. Repeat with 10 to 14 day intervals until berries begin to soften. Apply in 1200 to 1500 l spray water/ha. After pea size of berries Mancozeb 800 WP applications may result in visible spray deposits and in which case the application of SBF SL alone could be considered maintaining the withholding period. In such a case, intervals must be shortened.

Crop	Disease	Maximum rate per ha	Remark
Potatoes	Late blight (<i>Phytophthora infestans</i>)	3 l SBF + 2 kg Mancozeb 800 WP	Start application 21 days after emergence or sooner depending on conditions favouring late blight infections, or with susceptible cultivars. Apply every 7 days in 500 l water/ha as a direct spray over the rows. Increase the spray water volume per hectare as the plants increase in size. If late blight is present in a field, the spray interval should be shortened to 5 days. Do not apply within 21 days of a copper application.

Important notes:

SBF SL must only be applied to actively growing plants to ensure that there is adequate sap flow to transport the product throughout the plant.

Plants should not be treated when under any kind of stress (moisture or heat stress or waterlogged soil) as this may lead to phytotoxicity, i.e. leaf spot, gummosis, chlorosis, necrosis, stunting or deformation.

Do not apply if day temperatures are above 30°C or under conditions of high relative humidity.

SBF SL should preferably be applied early in the morning or late afternoon.

Repeat application if more than 10 mm rainfall has occurred within one hour of application.

Wait for leaves to dry after rain or heavy dew before applying.

In the case of Phytophthora root rot of citrus:

Apply as a light cover spray to citrus trees from September to early March.

Apply as a preventative sprays as soon as disease symptoms are noticed, or earlier if an infection is diagnosed in roots, soil or irrigation water.

Do not apply to citrus later than stage 4 on the scale 0 – 10 of decline. Refer to “CRI Production Guidelines”, Part III.

In the case of late blight of potatoes:

Infected seed tubers can result in early infections, depending on climatic conditions. In this instance, start application with first sign of disease symptoms.

Bio-Chem SBF

Reg. No. L 0000 ACT No. 36 of 1947 / WET Nr. 36 van 1947

'n Wateroplosbare, vloeibare, sistemiese swamdoder vir die beheer van siektes soos aangedui. stimuleer ook die plant se natuurlike beskermingsreaksies teen sommige van die genoemde siektes.

Aktiewe Bestanddeel: Kaliumfosfiet 560 g/l, (Fosforsuur ekwivalent) 400 g/l
Netto volume: 25 L

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VERSIGTIG



Lot Nr.:

Datum van Vervaardiging:

STOOR BY KAMERTEMPRATUUR. HOU WEG VAN DIREKTE SONLIG. HOU DIE HOER DEEGLIK TOE WANNEER NIE IN GEBRUIK NIE.

WAARSKOWINGS

Weerhoudingsperiode – Minimum tyd tussen laaste toediening en oestyd:

Sitrus en aartappels: 14 dae

Druive: 28 dae

Moet nie toedien binne 21 dae voor of na koper toediening nie.

- Hanteer die produk versigtig.
- Giftig indien ingeneem word.
- Veroorsaak oog-, vel- en respiratoriese sisteem irritasie.
- SBF SL moet slegs op aktief groeiende plante toegedien word.
- Behandeling kan fitotoksies wees vir plante wat aan enige druk ly, soos die wat aan droogte of uitermatige hitte ly. Sitrus moet aktief groei en wingerd moet nie onder druk verkeer nie, anders kan fitotoksiese reaksies soos blaarskroei en gomvorming ontwikkel.
- Alhoewel SBF SL geneutraliseer is kan dit steeds korrosief wees vir metale. Dien toe uit plastiek of veselglas houers.
- Stoor in 'n koel en droë plek, weg van voedsel en voer.
- Hou buite bereik van kinders, oningeligte persone en diere.
- Weerstand: Soos die meeste ander sistemiese swamdoders, kan die gebruik van SBF SL lei tot die seleksie van minder vatbare patogene met die gevolglike ontwikkeling van minder sensitiewe patogene populasies. Afwisseling van SBF SL met middels uit verskillende chemiese klasse bly 'n lewensvatbare anti-weerstandbestuurstrategie.

Alhoewel hierdie middel aan uitgebreide toetse onder 'n verskeidenheid van toestande onderwerp is, kan die registrasiehouer nie waarborg dat dit effektief sal wees onder alle omstandighede nie omdat die werking en effek daarvan beïnvloed kan word deur faktore soos abnormale klimaats- en bergingstoestande; kwaliteit van verdunningswater; verenigbaarheid met ander stowwe nie aangedui op die etiket nie en die weerstand van die plaag teen die betrokke middel asook die metode, tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer ook nie verantwoordelikheid vir enige skade aan gewasse, plantegroei, die omgewing of die nadelige uitwerking op mens of diere nie, of vir die onvermoë van die betrokke middel om te presteer nie, as gevolg van die gebruiker se versuim om die etiket se aanwysings te volg of vir die voorkoms van toestande wat nie voorsien kon word in terme van die registrasie nie. Raadpleeg die verskaffer indien daar enige onsekerheid is.

VOORSORGMAATREËLS

Stoor slegs in houer met oorspronklike etiket.

Vermyn inaseming van sproei.

Was met seep en water na gebruik of in geval van toevallige kontak met vel.

Dra handskoene en 'n gesigmasker gedurende hantering.

Vermyn kontak met vel en oë. In geval van toevallige oogkontak, was met lopende water vir ten minste 15 minute. Kry mediese aandag indien irritasie voortduur.

Moenie eet, drink of rook tydens vermenging of toediening nie.

Was hande en gesig voordat daar geëet, gedrink, gerook of die toilet besoek word.

Vermyn kontak met die sproei soveel as moontlik. Verseker dat sproei nie wegdryf na aangrensende gewasse, weiding, riviere of damme nie.

Was enige gekontamineerde klere na toediening.

Was toerusting voordat dit gebruik word vir ander middels en verseker dat die waswater wat weggegooi word nie gewasse, weiding, riviere, damme of waterbronne besoedel nie.

Voorkom die besoedeling van kos, voer, drinkwater en eetgerei tydens hantering, berging en vernietiging.

Wanneer SBF SL as blaarbespuiting toegedien word, draai die leë houer om vir ten minste 30 sekondes tot die vloeï verminder tot 'n drup. Spoel daarna die leë houer drie keer uit met 'n hoeveelheid water wat gelykstaande is aan 'n minimum van 10% van die volume van die houer. Maak seker dat die voorgeskrewe dosis toegedien en nie oorskry word nie. Pas ook spoelaksie toe op die inhoud van die spuittenk voordat die houer vernietig word deur gate daarin te steek, dit plat te slaan en op 'n veilige manier daarvan weg te doen. Moet dit nie vir enige ander aanwending gebruik nie.

Wanneer SBF SL aan die stam toegedien word, spoel die houer deeglik uit en vernietig die houer deur gate daarin te maak, dit plat te slaan en op 'n veilige manier daarvan weg te doen. Doen weg met die spoelwater deur nie gewasse, beweiding of riviere en damme te kontamineer nie.

Moet die houer vir geen ander doel gebruik nie.

Voorkom die besoedeling van kos, voer, drinkwater en eetgerei tydens hantering, berging en vernietiging.

GEBRUIKSAANWYSINGS:

Gebruik slegs soos aangedui

Versoenbaarheid:

Die versoenbaarheid van SBF SL met ander middels in terme van veiligheid en biologiese effektiwiteit moet nog bevestig word.

Moet nie toedien binne 21 dae voor of na 'n koper toediening nie.

Moet SBF SL nie met hoogs alkaliese middels, soos kalkswael of Bordeaux mengsel nie.

Dit word aanbeveel om eers 'n mengbaarheidstoets te doen voor SBF SL met ander chemiese middels gemeng word.

Boom / plant toestand:

Moet nie plante wat onder stremming verkeer (bv. hitte, droogte, versuiping en swaar vrugset), behandel nie, aangesien sodanige toestande aanleiding kan gee tot gewasskade (bv. skroei van blare of vrugte of gomvorming).

Menginstruksies:

Hou die versoenbaarheidsinstruksies in gedagte. Vul die tenk tot die helfte van sy kapasiteit met skoon, hoë kwaliteit water terwyl gemeng word. Voeg dan die verlangde hoeveelheid SBF SL by voor die res van die water bygevoeg word. Moet nie die mengsel oornag in die tenk laat staan nie maar voltooi eerder die toediening. SBF SL is heeltal wateroplosbaar en moet eerste by die water gevoeg word, dan deeglik gemeng word voor enige ander produkte bygevoeg word. Benatters moet laaste bygevoeg word.

Gewas	Siekte	Maksimum dosis / ha	Opmerkings
Tafel- en Wyndruive	Donsige skimmel (<i>Plasmopara viticola</i>)	5 l SBF SL + 1.8 kg Mancozeb 800 WP	Begin voorkomende toediening sodra lote 10 cm lank is. Herhaal elke 10 tot 14 dae tot korrels begin sag word. Dien 1200 tot 1500 l spuitmengsel/ha toe. Indien met SBF SL/Mankoseb kombinasie na ertjie-korrel grootte volgehou word, mag dit 'n sigbare spuitneerslag op die korrels tot gevolg hê. Indien buitengewoon hoë siektedruk voorkom nadat die korrels ertjie-grootte bereik het en die blare beskerming benodig, dien slegs SBF SL teen 300 ml per 100 liter water toe. Hou vol met die behandeling vir solank nodig solank die onthoudingsperiode in gedagte gehou word. Verkort die interval tussen behandelings in hierdie geval.

Gewas	Siekte	Maksimum dosis / ha	Opmerkings
Citrus	Phytophthora root rot	3.5 – 7 l SBF SL	Blaartoediening: Dien toe tot vroeë Maart as 'n ligte dekbespuiting wat deur die boom ry volume bepaal word. Herhaal elke 8 weke. Blare moet onder toestande van hoë turgordruk verkeer wanneer SBF SL toegedien word om brandskade te voorkom. Moet nie toedien wanneer nuwe blare ontwikkel nie. Stel eerder die behandeling uit tot die nuwe blaargroei begin verhard. Stamverf behandeling: Maak 'n 1:1 verhouding verdunning van SBF SL met water in 'n plastiek houer. Verf 'n 35 cm hoë strook vanaf grondvlak na bo, rondom die hele stam met die oplossing. Verf slegs die bo-stam en laagste take indien ent-onverenigbaarheid voorkom. Benatting, en gevolglik absorpsie van SBF SL, kan verbeter word deur die byvoeging van 'n geskikte benattingsmiddel. Begin behandelings met die aanvang van die reënseisoen en dien opvolgbehandelings tweemaandeliks toe gedurende die reënseisoen. Sistemiese translokasie na die wortels vind plaas wanneer SBF SL toegedien word wanneer plante nie aktief vegetatief groei nie. Stel eerder behandeling uit tot die nuwe blaargroei verhard het.

Gewas	Siekte	Maksimum dosis / ha	Opmerkings
Aartappels	Laatroes (<i>Phytophthora infestans</i>)	3 l SBF + 2 kg Mancozeb 800 WP	Begin voorkomende behandeling 21 dae na opkoms of vroeër indien toestande gunstig is vir die ontwikkeling van die siekte, of indien vatbare kultivars aangeplant is. Dien as direkte bespuiting op die ry toe in 500 l water/ha elke 7 dae. Vermeerder die volume bespuitingswater per hektaar soos die plante groter word. Verkort die spuitintervalle na elke 5 dae indien laatroes voorkom. Moet nie behandel binne 21 dae voor of na 'n koper behandeling nie.

Belangrike notas:

Behandel slegs aktiefgroeiende plante, wanneer genoegsame sapvloeï plaasvind, aangesien

SBF SL sistemies is en effektiewe translokasie van die produk sodoende verseker word.

Moet nie plante wat onder stremming verkeer (bv. hitte, droogte, versuiping en swaar vrugset), behandel nie, aangesien sodanige toestande aanleiding kan gee tot gewasskade (bv. skroei van blare of vrugte, gomvorming, vergeling, nekrose, verdwering of vervorming).

Dit word aanbeveel dat toediening gestaak word, ongeveer een uur voordat die lugtemperatuur 30 °C bereik. Moet nie behandel wanneer temperature bo 30°C is of onder hoë relatiewe humiditeit toestande nie.

Dien vroegoggend of laatmiddag toe.

Herhaal die toediening indien meer as 10 mm reën geval het binne een uur na toediening. Wag tot blare droog is voor behandeling na reëns of swaar dou neerslae.

In die geval van Phytophthora wortel- en stamvrot van sitrus:

Gebruik **SBF SL** verkieslik voorkomend teen Phytophthora wortel- of kraagvrot. Dien toe as 'n ligte dekbespuiting van sitrus bome vanaf September tot vroeë Maart. Begin met behandelings voor die eerste simptome van siekte waargeneem word, verkieslik voor stadium 4 (volgens die vervalskaal van 1 tot 10, aangedui in Outspan Production Guidelines, Part 3), sodat beter effektiwiteit verseker is.

In die geval van laatroes van aartappels:

Geïnfekteerde saadaartappels kan lei tot vroeë infeksies afhangende van klimaatstoestand. In hierdie geval moet behandeling begin sodra die eerste tekens van siektesimptome waargeneem word.