

PROTECTOR 400 SC

Act No. 36 of 1947

SA Reg. No. L8606 / NAM Reg No. N-AR 1176 / BWA Reg. No. W1301280

A suspension concentrate, contact and translaminar fungicide for the control of various diseases in crops as listed.

ACTIVE INGREDIENTS:

Pyrimethanil 400 g/ℓ

REGISTERED BY:

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WARNINGS

May be harmful if swallowed
May be harmful if in contact with skin
Harmful if inhaled
Cause mild skin irritation
Cause eye irritation
Toxic to aquatic life with long lasting effects

WITHHOLDING PERIODS (Minimum number of days between last application and harvest):

- Citrus (orchard) 90 Days
- Wine grapes 35 Days
- Table grapes 7 Days
- Potatoes 7 Days
- Potatoes (tank mix with Constrictor 250 EC only) 14 Days
- Onions and Garlic 3 Days
- Stone fruit (apricots, nectarines, peaches and plums) 1 Day
- Strawberries 1 Day

Compliance with these withholding periods and application methods will ensure that residues do not exceed local maximum residue limits (MRL), but the import tolerances of other countries might possibly be exceeded. If the crop to be treated is intended for export, consult the relevant importer or exporting body regarding the use of this product, MRL and recommended withholding periods. Although **Protector 400 SC** is regarded as crop-safe on most of the important cultivars, this does not mean that a more sensitive cultivar might be available in future. **Protector 400 SC** must be tested on **new cultivars** prior to usage over big areas.

RE-ENTRY INTERVAL: Do not enter treated area until spray deposit has settled down / dried unless wearing protective clothing.

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions, because the action and effect thereof may be affected by factors such as abnormal climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the disease against the remedy concerned as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, and the environment or harm to man/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

If medical advice is needed, have product container or label at hand.
Avoid breathing mist/vapours/spray.
Wash hands and face thoroughly after handling. Do not touch eyes.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
IF SWALLOWED: Get medical help.
IF ON SKIN: Wash with plenty of soap and water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation occurs: Get medical help.
Take off contaminated clothing and wash it before reuse.
Collect spillage.
Store locked up.
Dispose of contents and container in accordance with national regulations.

Prevent spray or mist drifting onto other crops, grazing, rivers, dams, and other areas not under treatment.
Clean all equipment thoroughly after use and dispose of wastewater without polluting the environment.

TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS: Invert empty container over mix or spray tank and allow draining for at least 30 seconds until flow has slowed to a drip. Triple rinse the empty container with clean water equal to a minimum of 30 % of the volume of the container. Add rinsing to the contents of the spray tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler (www.croplife.co.za). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.

RELEVANT SUBSTANCES:

Pyrimethanil (Cas no: 53112-28-0) Aquatic Chronic Category 2, H411 (40 % w/v).
1,2-benzisothiazol-3-one (Cas no: 2634-33-5) Skin Sensitization Category 1, H317; Aquatic Acute Category 1, H400 (< 1 % w/v).

FIRST AID MEASURES

In case of accident or if you feel unwell seek medical advice immediately and show this LABEL where possible.

INHALATION:

- Remove the victim from immediate source of exposure. Move victim to fresh air, if it can be done safely, and keep comfortable. If victim's breathing has stopped, perform artificial respiration.
- Administer oxygen if victim's breathing is difficult or irregular. Get medical help.

- SKIN:**
- Remove and isolate contaminated clothing, shoes, and leather goods immediately and take a shower.
 - Rinse affected areas with non-abrasive soap or mild detergent and large amounts of running water. Wash contaminated clothing before reuse. Get medical help if irritation develops and persists.
- EYES:**
- Rinse cautiously with water for several minutes.
 - Remove contact lenses after 5 minutes if present and easy to do. Continue rinsing while holding eyelids apart. Seek medical help if irritation continues.
- INGESTION:**
- If swallowed, DO NOT induce vomiting, unless instructed to do so by poison control center or doctor.
 - Have person sip a glass of water if able to swallow. Never give anything by mouth to an unconscious person. If vomiting does occur, keep on giving fluids. Get medical help.
- NOTE TO PHYSICIAN:**
- There is no specific antidote. All treatments should be based on observed signs and symptoms of distress in the patient.
- POTENTIAL HEALTH EFFECTS:**
- Effects of exposure (inhalation, ingestion, or skin contact) to substance may be delayed.

RESISTANCE WARNING

For resistance management, **Protector 400 SC** is a group code (9) fungicide. Any fungal population may contain individuals naturally resistant to **Protector 400 SC** and other group code (9) fungicides. The resistant individuals can eventually dominate the fungal population if these fungicides are used repeatedly. These resistant fungi may not be controlled by **Protector 400 SC** or any other group code (9) fungicides.

To delay fungicide resistance:

- avoid exclusive repeated use of fungicides from the same fungicide group code. Alternate or tank mix with registered products from different fungicide group codes,
- for tank mixing or alternation with products in other fungicide group codes, refer to applicable individual product labels,
- integrate other control methods (chemical, cultural, biological) into disease control programmes.

No more than two **Protector 400 SC** applications should be made to the same vineyard per season. If two **Protector 400 SC** applications are used in the same vineyard, they should never be consecutive. A botryticide with a different mode of action should be applied between the two **Protector 400 SC** applications.

MODE OF ACTION

Pyrimethanil is an anilino-pyrimidine (AP) fungicide (FRAC group 9). The mode of action includes the inhibition of methionine biosynthesis affecting cystathionine β -lyase and the secretion of hydrolytic enzymes. It also leads to the inhibition of germ tube elongation at low concentrations.

DIRECTIONS FOR USE – use only as directed

COMPATIBILITY:

- Do not mix **Protector 400 SC** with products exhibiting alkaline reactions, aluminium containing products, lime sulphur and Bordeaux mixtures.
- Protector 400 SC** has shown to be compatible with most agrochemicals. However, a physical compatibility test is always recommended prior to application.
- Protector 400 SC** is compatible with formulations containing diphenylamine (DPA) used for post-harvest treatment of superficial scald in apples and pears, however, a physical compatibility test is recommended prior to application. Such a mixture must be thoroughly agitated at all times.
- Protector 400 SC** is *incompatible* with chlorine.

MIXING INSTRUCTIONS:

- Half fill the mixing tank with clean water. Shake the **Protector 400 SC** container thoroughly immediately before use and *pre-mix the required volume in at least 10-liter water*. Pre-mix any other product(s) to be tank mixed in the same way *separately*. While agitating the spray tank water, add the pre-mixed product(s) in the following sequence: wettable powders, water dispersible granules, suspension concentrates, emulsifying concentrates and soluble concentrates last. Top up the mixing tank with the required quantity clean water whilst agitating. Agitate constantly before and during application. DO NOT leave the prepared spray mixture in the spray tank for any length of time, e.g., overnight. Periodically measure the **Protector 400 SC** concentration of post-harvest treating solutions from dip- and drencher tanks to maintain the proper level of active ingredient.
- For mixing with citrus wax, (1) shake the **Protector 400 SC** container thoroughly; (2) add the correct amount of **Protector 400 SC** to a small volume of lukewarm water and mix; (3) add mixture to wax and stir thoroughly. Continuous agitation in mix tank during application is necessary to maintain a uniform suspension.

APPLICATION TABLE		
CROP and DISEASE	DOSAGE	REMARKS
APPLES and PEARS (Post-harvest treatment) Post-harvest decay caused by <i>Botrytis cinerea</i> and <i>Penicillium expansum</i> .	125 mL / 100 L water (500 ppm pyrimethanil)	Fruit must be thoroughly rinsed and disinfected with Sporekill [®] (L7115) or chlorine according to set procedures prior to treatment with Protector 400 SC . Apply Protector 400 SC suspension either as a drench or dip treatment ensuring contact time with the fruit for at least 1 minute. Do not rinse fruit after treatment. It is important to treat the fruit as soon as possible after harvest. Tanks can be topped up with 125 mL Protector 400 SC for every 100 L of fresh water added. Periodically measure the Protector 400 SC concentration of the treating solutions from dip- and drencher tanks to maintain the proper level of active ingredient.
APPLES (PRE-HARVEST TREATMENT TO APPLES INTENDED FOR COLD STORAGE WITHOUT RECEIVING A POST-HARVEST FUNGICIDE TREATMENT AFTER HARVESTING) Post-harvest decay caused by <i>Botrytis cinerea</i> and <i>Penicillium expansum</i> .	2 L / hectare	Apply a single application of Protector 400 SC , not earlier than 14 days before harvest up to day of harvest, as a full cover spray. Fruit should be thoroughly wetted.
CITRUS (Post-harvest treatment) Post-harvest decay caused by <i>Penicillium digitatum</i> (green mould) and <i>Penicillium italicum</i> (blue mould) including the Imazalil-resistant <i>Penicillium</i> populations.	<u>Drench or Dip treatment</u> 250 mL / 100 L water (1000 ppm pyrimethanil)	Fruit must be thoroughly rinsed and disinfected with Sporekill [®] (L7115) or chlorine according to set procedures prior to treatment with Protector 400 SC . Apply Protector 400 SC suspension either as a drench or dip treatment (ambient or hot water) ensuring contact time with the fruit for at least 2 minutes. <u>Use only the ambient water treatment on lemons</u> ; MRL will be exceeded with hot water treatment. Do not rinse fruit after treatment. It is important to treat the fruit as soon as possible after harvest. Dip tanks can be topped up with 250 mL Protector 400 SC for every 100 L of fresh water added. Periodically measure the Protector 400 SC concentration of the treating solution from dip tanks to maintain the proper level of active ingredient.
	OR	

	<u>Citrus wax treatment</u> 1000 mL / 100 ℓ wax (4000 ppm pyrimethanil)	Apply in citrus wax using conventional waxing equipment at rate of 1 – 1.5 ℓ wax solution per ton of fruit. See mixing instructions. Please Note: Protector 400 SC is highly recommended to control and manage Imazalil tolerant and resistant Penicillium populations.
(Orchard application) Botrytis flower blight <i>Botrytis cinerea</i> (syn. <i>Botryotinia fuckeliana</i>)	120 mL / 100 ℓ	BOTRYTIS FLOWER BLIGHT: Apply the first Botrytis flower blight application at blossom. Apply Protector 400 SC application in a preventative fungicide spray programme with fungicides from different FRAC group codes, in 14 – 21-day intervals, depending on cultivar and disease pressure. Ensure thorough spray coverage. Apply Protector 400 SC only once in the preventative flower blight spray programme.
TABLE and WINE GRAPES <i>Botrytis cinerea</i>	120 mL / 100 ℓ water in 1000 to 1500 ℓ water/ha	Apply as a high volume full cover spray. If less than four applications for Botrytis control are made per season, Protector 400 SC may only be applied once before harvest , for example: at pea-berry size or 35 days (7 days in case of table grapes). Protector 400SC must be preceded and/or succeeded with a botryticide with a different mode of action such as IproFlo (L8213). Refer to the "Resistance Warning". When four or more applications are made per season for Botrytis control, Protector 400 SC may be applied twice per season before harvest , but not consecutively for example: at pea-berry size and 35 days (7 days in case of table grapes). Protector 400 SC applications must be preceded or alternated and succeeded in the spray program with a botryticide with a different mode of action such as IproFlo (L8213). Refer to the "Resistance Warning".
ONION and GARLIC Purple blotch (<i>Alternaria porri</i>) and <i>Botrytis</i> spp.	150 mL / 100 ℓ	Apply Protector 400 SC in a preventative fungicide spray programme, in 14-day intervals, with a maximum of three Protector 400 SC applications per season. Alternate Protector 400 SC with fungicides from different FRAC group codes. A minimum of 750 mL Protector 400 SC/ha must be applied. Ensure thorough coverage of the foliage.
ORNAMENTALS		CAUTION: Protector 400 SC was not tested on all ornamental species or cultivars, test a few plants before widespread use. Withholding period not applicable, but do not handle treated plants while still wet.
PROTEAS Fungal leaf diseases (<i>Mycosphaerella</i> , <i>Pseudocerospora</i> , <i>Leptosphaeria</i> spp.), shoot blight (<i>Botryosphaeria</i> spp.) and Botrytis-blight (<i>Botrytis</i> spp.)	120 mL / 100 ℓ	Apply Protector 400 SC in a preventative fungicide spray programme, in 14-day intervals, with a maximum of three Protector 400 SC applications per season. Alternate Protector 400 SC with fungicides from different FRAC group codes. Apply in 600 – 1200 ℓ water/ha. Ensure thorough coverage of the foliage.
OTHER ORNAMENTALS Botrytis-blight (<i>Botrytis</i> spp.) <i>Alternaria</i> leaf spot (<i>Alternaria</i> spp.)		Apply Protector 400 SC in a preventative fungicide spray programme, in 14-day intervals, with a maximum of three Protector 400 SC applications per season. Alternate Protector 400 SC with fungicides from different FRAC group codes. Ensure thorough coverage of the foliage.
POTATOES Control of grey mould (<i>Botrytis</i> spp.) on foliage	150 mL / 100 ℓ	Apply Protector 400 SC as a high volume full cover spray. Apply Protector 400 SC in a preventative fungicide spray programme, in 7 day intervals, with a maximum of three Protector 400 SC applications per season. Alternate Protector 400 SC with fungicides from other FRAC group codes. NB Start applications before canopy closure. Apply a minimum of 750 mL Protector 400 SC/ha. Ensure thorough coverage of the foliage.
Control of early blight (<i>Alternaria solani</i>)	120 mL PROTECTOR 400 SC / 100 ℓ water PLUS 80 mL CONSTRICTOR 250 EC / 100 ℓ water	Apply the PROTECTOR 400 SC tank-mix as a high volume full cover spray in a preventative fungicide spray programme, in 14-day intervals, with a maximum of two (2) PROTECTOR 400 SC plus CONSTRICTOR 250 EC tank-mix applications per season. Apply within a spray programme that includes fungicides from other FRAC group codes. Apply a minimum of 600 mL PROTECTOR 400 SC/ha. Ensure thorough coverage of the foliage
STONE FRUIT (Apricots, Nectarines, Peaches and Plums) Post-harvest decay caused by <i>Botrytis</i> and <i>Monilinia</i> spp.	120 mL / 100 ℓ (Minimum of 2 ℓ/ha)	Apply as a full cover spray. Ensure that the fruit are thoroughly wetted. Can be applied twice, with a 14-day interval, up to 1 day prior to harvest.
STRAWBERRIES Control of grey mould (<i>Botrytis cinerea</i>)	2 ℓ / hectare	Apply Protector 400 SC in a preventative fungicide spray programme. Repeat in 14-day intervals with a maximum of three (3) Protector 400 SC applications per season. Do not apply more than two (2) successive Protector 400 SC sprays. Interchange the Protector 400 SC applications with fungicides from other FRAC group codes. Ensure good coverage of foliage, flowers, and fruit during applications.

PROTECTOR 400 SC

Wet Nr. 36 van 1947
SA Reg. No. L8606 / NAM Reg No. N-AR 1176 / BWA Reg. No. W1301280

'n Suspensie konsentraat kontak, translaminêre swamdoder vir die beheer van verskeie siektes op gewasse soos gelys.

AKTIEWE BESTANDEEL: Pirimetaniel 400 g/ℓ

GEREGISTREER DEUR:

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WAARSKUWINGS

Mag skadelik wees indien ingesluk
Moontlik skadelik in aanraking met vel
Skadelik indien ingeasem
Veroorsaak geringe velirritasie
Veroorsaak oogirritasie
Giftig vir waterlewendende organismes met langdurige gevolge

ONTHOUDINGSPERIODES (Minimum aantal dae tussen laaste toediening en oes):

- *Aarbeie* 1 dag
- *Aartappels* 7 dae
- *Aartappels (tenkmengsel met Constrictor 250 EC alleenlik)* 14 dae
- *Wyndruiwe* 35 dae
- *Tafeldruiwe* 7 dae
- *Sitrus (boord)* 90 dae
- *Steenvrugte (appelkose, nektariens, perskes en pruime)* 1 dag
- *Uie en knoffel* 3 dae

Nakoming van hierdie onthoudingsperiodes sal verseker dat die plaaslike maksimum residu limiete (MRL) nie oorskry word nie, maar mag dalk nie voldoen aan die invoereis van ander lande nie. Indien die gewas wat behandel word bestem is vir uitvoer, raadpleeg die betrokke in- of uitvoerder rakende die gebruik van hierdie produk, die MRL en aanbevole onthoudingsperiodes.

Alhoewel **Protector 400 SC** as gewasveilig beskou word op die meeste belangrike kultivars, beteken dit nie dat 'n meer sensitiewe kultivar in die toekoms op die mark kan kom nie. **Protector 400 SC** moet eers getoets word op **nuwe kultivars** voordat dit oor groot areas aangewend word.

HERBETREDINGSINTERVAL: Moet nie behandelde gebied binnegaan voordat die spuitneerslag neergedaal het / droog is nie, tensy beskermende oorklere gedra word.

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 produkte wat nie op die etiket aangedui is nie en die voorkoms van weerstand 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 effekte op mens of dier of vir 'n gebrek aan doeltreffendheid, as gevolg van die versuim van die gebruiker om die 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 geval van enige onsekerheid.

VOORSORGMATREËLS

Indien mediese advies benodig word, hou die produkhouer of -etiket byderhand.

Hou buite bereik van kinders.

Lees sorgvuldig en volg alle instruksies.

Vermy inaseming van stuifsel/dampe/spuitstof.

Was hande en gesig deeglik na hantering. Moet nie aan oë raak nie.

Gebruik slegs buitenshuis of in 'n goed geventileerde area.

Vermy vrystelling in die omgewing.

INDIEN INGESLUK: Kry mediese hulp.

INDIEN OP VEL: Was met baie seep en water.

INDIEN INGEASEM: Neem slagoffer na vars lug en hou gemaklik vir asemhaling.

INDIEN IN OË: Spoel versigtig met water vir etlike minute. Verwyder kontaklense indien aanwesig en maklik om te verwyder. Hou aan met spoel.

Indien velirritasie ontstaan: Kry mediese hulp.

Trek alle besoedelde klere uit en was dit voor hergebruik.

Maak stortsel bymekaar.

Berg agter slot en grendel.

Raak ontslae van inhoud/houer volgens nasionale regulasies.

Verhoed dat spuitstof wegdryf na ander gewasse, weiding, riviere, damme en ander gebiede wat nie onder behandeling is nie.

Maak alle toerusting deeglik skoon na gebruik en gooi afvalwater weg sonder om die omgewing te besoedel.

SPOEL DIE LEË HOUER DRIE MAAL SOOS VOLG: Keer die leë houer om oor 'n meng- of spuittenk en laat vir ten minste 30 sekondes leegloop totdat die vloei stadiger word tot 'n gedrup. Spoel die leë houer drie maal met skoon water gelyk aan 'n minimum van 30 % van die volume van die houer. Voeg spoelwater by die inhoud van die spuittenk. Kap gate in die gespoelde houer, waarna dit aan 'n goedgekeurde versamelaar of verwerker oorhandig moet word (www.croplife.co.za). Moenie die houer begrawe, verbrand of aan enige ander partye skenk wat dit as houer vir voedsel of drinkgoed mag gebruik nie.

RELEVANTE STOWWE:

Pirimetaniel (Cas no: 53112-28-0) Waterlewend Kronies Kategorie 2, H411 (40 % m/v).

1,2-bensisotiasolien-3-oon (Cas no: 2634-33-5) Vel Allergie Kategorie 1, H317; Waterlewend Akut Kategorie 1, H400 (< 1 % m/v).

NOODHULPBEHANDELING

In die geval van 'n ongeluk of as jy onwel voel, verkry onmiddellik mediese hulp en wys hierdie ETIKET waar moontlik.

INGEASEM:

- Neem die slagoffer weg van die onmiddellike bron van blootstelling. Verskuif die slagoffer na vars lug as dit veilig gedoen kan word en hou gemaklik. Indien die slagoffer ophou asemhaal, pas kunsmatige asemhaling toe.

- Dien suurstof toe as die slagoffer se asemhaling moeilik of onreëlmatig is. Kry mediese hulp.
- VEL:**
- Verwyder en isoleer besmette klere, skoene en leergoedere dadelik en stort.
 - Spoel aangetaste areas (vel) dadelik met nieskurende seep of sagwerkende wasmiddel en groot hoeveelhede lopende water. Was besmette klere voor hergebruik.
- OË:**
- Kry mediese hulp indien irritasie ontwikkel en voortduur.
 - Spoel versigtig met water vir etlike minute.
 - Verwyder kontaklense na 5 minute indien aanwesig en maklik om te doen. Hou aan met spoel terwyl ooglede vanmekaar gehou word. Kry mediese hulp indien irritasie voortduur.
- OPNEMING:**
- Indien ingesluk, MOENIE vomering aanmoedig nie, tensy deur 'n gifbeheersentrum of dokter aangesê om dit te doen.
 - Laat persoon slukkies van 'n glas water neem indien in staat om te sluk. Moet nooit iets per mond aan 'n bewustelose persoon toedien nie. Indien vomering plaasvind, hou aan vloeiastowwe gee. Kry mediese hulp.
- NOTA AAN GENEESHEER:**
- Daar is nie 'n spesifieke teenmiddel nie. Alle behandeling moet gebaseer word op waargenome tekens en simptome van nood by die pasiënt.
- MOONTLIKE GESONDHEIDSGEVOLGE:**
- Gevolge van blootstelling (inaseming, opneming of velkontak) aan stof kan vertraag wees.

WEERSTANDSWAARSKUWING

Protector 400 SC is 'n groepkode (9) swamdoder. Enige populasie van 'n spesifieke swam mag individue insluit wat 'n natuurlike weerstand teen **Protector 400 SC** of enige ander groepkode (9) swamdoder het. Indien hierdie swamdoders herhaaldelik aangewend word, kan die weerstandbiedende individue uiteindelik die swampopulasie oorheers. Hierdie weerstandbiedende swamme sal waarskynlik nie deur **Protector 400 SC** of enige ander groepkode (9) swamdoder beheer word nie.

Om weerstand teen swamdoders te vertraag:

- vermy die eksklusiewe herhaaldelike gebruik van swamdoders met dieselfde groepkode. Wissel af met, of gebruik tenkmengsels van produkte in verskillende swamdoder groepkodes,
- raadpleeg toepaslike individuele produketikette wanneer daar afgewissel word, of tenkmengsels gemaak word, met produkte in ander swamdoder groepkodes.
- Integreer ander beheermaatreëls (chemies, verbouing, biologies) in swamdoder programme.

Moet nie meer as twee **Protector 400 SC** toedienings per seisoen op dieselfde wingerd maak nie. Waar twee **Protector 400 SC** toedienings per seisoen gemaak word, moet dit nie as opeenvolgende toedienings geskied nie. 'n Botrytis-middel met 'n ander werkswyse moet altyd tussen twee **Protector 400 SC** toedienings ingepas word.

WERKINGSWYSE

Pyrimethanil is 'n anilino-pirimidien (AP) swamdoder (FRAC groep 9). Die werkingwyse sluit in die inhibisie van metionienbiosintese wat sistetonien β -liase en die afskeiding van hidrolitiese ensieme beïnvloed. Dit lei ook tot die inhibisie van kiembuisverlenging by lae konsentrasies.

GEBRUIKSAANWYSINGS – gebruik slegs soos aangedui

VERENIGBAARHEID:

- Moet nie **Protector 400 SC** meng met alkaliese reaksie produkte, asook aluminium-bevattende produkte, kalkswael en Bordeaux mengsels nie.
- Alhoewel **Protector 400 SC** vermengbaar is met die meeste landbouchemikalieë, word 'n fisiese mengbaarheidstoets altyd aanbeveel voor gebruik.
- **Protector 400 SC** is mengbaar met formulasies wat difenielamien (DPA) bevat vir na-oesbehandeling van oppervlakkige brand op appels en pere, maar 'n vooraf mengbaarheid toets word aanbeveel voor gebruik. Sulke tenkmengsels moet deeglik vóór en deurgaans tydens toediening geroer word.
- **Protector 400 SC** is onverenigbaar met chloor.

MENGINSTRUKSIES:

- Maak die mengtenk halfvol met skoon water. Skud die **Protector 400 SC**-houer deeglik dadelik voor gebruik en maak die benodigde volume vooraf aan in minstens 10 liter water. Maak enige ander produk(te) wat in die tenk gemeng moet word afsonderlik aan op dieselfde manier. Terwyl die water in die spuittenk omgeroer word, voeg die voorafgemengde produk(te) in die volgende volgorde by: benatbare poeiers, in waterdispergeerbare korrels, suspensiekonsentrate, emulgeerkonsentrate en oplosbare konsentrate laaste. Maak die mengtenk vol met die benodigde hoeveelheid skoon water terwyl geroer word. Roer aanhoudend voor en gedurende toediening. MOENIE die tenkmengsel laat afsak nie en moenie die aangemaakte spuitmengsel vir 'n geruime tyd, bv. oornag, in die spuittenk laat nie. Bepaal die **Protector 400 SC** konsentrasie in na-oes dompeltente voortdurend om die korrekte konsentrasie aktiewe bestanddeel te handhaaf.
- Om te vermeng met sitrus waks, (1) skud die **Protector 400 SC** houer deeglik; (2) meng die korrekte volume **Protector 400 SC** eers met klein volume loutwarm water; (3) voeg dan by waks en roer goed. Roer die waksmengsel in die mengtenk deurlopend tydens toediening om te verseker dat dit nie uitsak nie.

TOEDIENINGSTABEL		
GEWAS en SIEKTE	DOSIS	OPMERKINGS
AARBEIE Beheer van grys-skimmel (<i>Botrytis cinerea</i>)	2 ℓ / hektaar	Dien Protector 400 SC toe in 'n voorkomende swamdoder spuitprogram. Herhaal toedienings met interalle van 14 dae. Maksimum van drie (3) Protector 400 SC aanwendings per seisoen. Moenie meer as twee (2) opeenvolgende Protector 400 SC bespuitings aanwend nie. Wissel Protector 400 SC af met middels uit ander swamdoder FRAC groepkodes. Verseker goeie bedekking van loof, blomme asook vrugte.
AARTAPPELS Beheer van grys-skimmel (<i>Botrytis</i> spp.) op loof	150 m ℓ / 100 ℓ	Dien toe as 'n hoë volume voldekbepuiting. Dien Protector 400 SC , in 'n voorkomende swamdoder spuitprogram toe, met interalle van 7 dae. Maksimum van drie Protector 400 SC aanwendings per seisoen. Wissel Protector 400 SC af met middels uit ander swamdoder groepkodes. <u>NB Begin bespuitings voor die rye toe maak.</u> Dien 'n minimum van 750 m ℓ Protector 400 SC /ha toe. Verseker deeglike bedekking, bo sowel as onderkant, van loof.
Beheer van vroeë roes (<i>Alternaria solani</i>)	120 m ℓ Protector 400 SC / 100 ℓ water PLUS 80 m ℓ Constrictor 250 EC / 100 ℓ water	Dien die Protector 400 SC tenkmengsel as 'n hoë volume voldekbepuiting in 'n voorkomende swamdoder spuitprogram, met 'n 14 dag interval, toe. 'n Maksimum van twee (2) Protector 400 SC plus Constrictor 250 EC tenkmengsel toedienings kan per seisoen as deel van 'n spuitprogram, met swamdoders vanuit ander FRAC groepkodes, toegedien word. Dien 'n minimum van 600 m ℓ Protector 400 SC / ha toe. Verseker dat plante goed bedek word.

<p>APPELS en PERE (Na-oes behandeling) Na-oes bederf veroorsaak deur <i>Botrytis cinerea</i> en <i>Penicillium expansum</i>.</p>	<p>125 mℓ / 100 ℓ water (500 dpm pirimetaniel)</p>	<p>Spoel en ontsmet vrugte deeglik volgens voorgeskrewe prosedure met Sporekill[®] (L7115) of gechlorigeerde water voor Protector 400 SC toediening.</p> <p>Dien die Protector 400 SC suspensie toe as 'n doop- of drenkbehandeling en verseker 'n kontak periode van minstens 1 minuut met vrugte. Moenie vrugte afspoel na toediening nie. Dit is belangrik dat vrugte so spoedig moontlik ná oes behandel word.</p> <p>Dompeltenke kan aangevul word met 125 mℓ Protector 400 SC vir elke 100 ℓ vars water wat bygevoeg word. Bepaal voortdurend die Protector 400 SC konsentrasie in die dompeltent om korrekte konsentrasie aktiewe bestanddeel te handhaaf.</p>
<p>APPELS (VOOR-OESBESPUITING VAN APPELS GEORMERK VIR KOUE OPBERGING WAT NIE VOORAF 'N NA-OES SWAMDODER BEHANDELING GAAN ONTVANG NIE.) Na-oes bederf veroorsaak deur <i>Botrytis cinerea</i> en <i>Penicillium expansum</i>.</p>	<p>2 ℓ / hektaar</p>	<p>Dien een voldekbepuiting Protector 400 SC toe, nie vroeër as 14 dae voor oes nie, tot op dag van oes. Vrugte moet deeglik benat word.</p>
<p>TAFEL- EN WYNDRUIWE <i>Botrytis cinerea</i></p>	<p>120 mℓ / 100 ℓ water in 1000 tot 1500 ℓ water/ha</p>	<p>Dien toe as 'n hoë volume voldekbepuiting.</p> <p>Indien minder as vier toedienings per seisoen vir die beheer van <i>Botrytis</i> gedoen word, mag Protector 400 SC slegs eenmaal vóór oes toegedien word, bv. slegs by ertjiekorrel stadium of 35 dae (of 7 dae in die geval van tafeldruiwe). Protector 400 SC moet vooraf en/of opgevolg word met 'n <i>Botrytis</i>-middel met 'n ander werkswyse soos IproFlo (L8213). Sien "Weerstandswaarskuwing".</p> <p>Indien vier of meer toedienings per seisoen vir die beheer van <i>Botrytis</i> gedoen word, mag Protector 400 SC slegs tweemaal vóór oes toegedien word maar nie agtereenvolgend nie, bv. by ertjiekorrel stadium en 35 dae (7 dae in die geval van tafeldruiwe). Protector 400 SC toedienings in die spuitprogram, moet voorafgegaan (of afgewissel) en opgevolg word met 'n <i>Botrytis</i>-middel met 'n ander werkswyse soos IproFlo (L8213). Sien "Weerstandswaarskuwing".</p>
<p>SITRUS (Na-oes behandeling) Na-oes bederf veroorsaak deur <i>Penicillium digitatum</i> (groenskimmel) en <i>Penicillium italicum</i> (blouskimmel) ingesluit Imazalil-weerstanbiedende <i>Penicillium</i> populasies.</p>	<p><u>Doop- of Drenkbehandeling</u> 250 mℓ / 100 ℓ water (1000 dpm pirimetaniel)</p> <p>OF</p> <p><u>Sitrus waks behandeling</u> 1000 mℓ / 100 ℓ waks (4000 dpm pirimetaniel)</p>	<p>Spoel en ontsmet vrugte deeglik volgens voorgeskrewe prosedure met Sporekill[®] (L7115) of gechlorigeerde water voor Protector 400 SC toediening.</p> <p>Dien die Protector 400 SC suspensie toe as 'n doop- of drenkbehandeling (koue of warmwater) en verseker 'n kontakperiode van minstens 2 minute met vrugte. <u>Gebruik slegs die kouewater behandeling op suurlemoene; warmwater behandeling sal veroorsaak dat MRL Limiet oorskry word.</u> Moenie vrugte afspoel na toediening nie. Dit is belangrik dat vrugte so spoedig moontlik ná oes behandel word.</p> <p>Dompeltenke kan aangevul word met 250 mℓ Protector 400 SC vir elke 100 ℓ vars water wat bygevoeg word. Bepaal die Protector 400 SC konsentrasie in dompeltent voortdurend om die korrekte konsentrasie aktiewe bestanddeel te handhaaf.</p> <p>Dien toe in sitrus waks met normale waks aplikator teen toedienings volume van 1 – 1.5 ℓ waks mengsel per ton vrugte. Sien menginstruksies.</p> <p>Let Wel: Protector 400 SC word hoogs aanbeveel vir beheer en bestuur van Imazalil tolerante en weerstanbiedende <i>Penicillium</i> populasies.</p>
<p>(Boord toediening) Botrytis bloeiselversenging <i>Botrytis cinerea</i> (syn. <i>Botryotinia fuckeliana</i>)</p>	<p>120 mℓ / 100 ℓ</p>	<p>BOTRYTIS BLOEISELVERSENGING</p> <p>Dien die eerste <i>Botrytis</i> bloeiselversenging aanwending toe met blom.</p> <p>Dien Protector 400 SC aanwendings in 'n voorkomende swamdoder spuitprogram toe met swamdoders van verskillende FRAC groepkodes, in 14 – 21 dae intervalle, afhangende van kultivar en siektedruk. Verseker deeglike spuitbedekking.</p> <p>Dien Protector 400 SC slegs een keer toe in die voorkomende <i>Botrytis</i> bloeiselversenging spuitprogram.</p>
<p>STEENVRUGTE (Appelkose, Nektariens, Perskes en Pruime) Na-oes bederf veroorsaak deur <i>Botrytis</i> en <i>Monilinia</i> spp.</p>	<p>120 mℓ / 100 ℓ (minimum van 2 ℓ/ha)</p>	<p>Dien toe as 'n volle dekbepuiting.</p> <p>Verseker dat die vrugte deeglik benat word.</p> <p>Kan twee keer toegedien word, met 'n 14 dag interval, tot en met 1 dag voor oes.</p>
<p>SIERPLANTE</p> <hr/> <p>PROTEAS Swamblaarsiektes (<i>Mycosphaerella</i>, <i>Pseudocercospora</i>, <i>Leptosphaeria</i> spp.), terugsterwing van stele en stingels (<i>Botryosphaeria</i> spp.) en <i>Botrytis</i>-skroei (<i>Botrytis</i> spp.)</p> <hr/> <p>ANDER SIERPLANTE <i>Botrytis</i> skroei en terugsterwing (<i>Botrytis</i> spp.) van plante en blomme. <i>Alternaria</i> blaar vlekke (<i>Alternaria</i> spp.)</p>	<p>120 mℓ / 100 ℓ</p>	<p>VERSIGTIG: Protector 400 SC is nie op alle sierplant spesies en kultivars getoets nie. Toets gewasveiligheid op 'n paar plante voor wydverspreide gebruik. Onthoudingsperiode nie van toepassing nie, maar moenie behandelde plante hanteer terwyl hulle nog nat is nie.</p> <hr/> <p>Dien Protector 400 SC toe in 'n voorkomende spuitprogram, in 14 dae intervalle, met 'n maksimum van drie Protector 400 SC toedienings per seisoen. Wissel Protector 400 SC toedienings af met swamdoders vanuit ander FRAC groepe.</p> <p>Dien toe in 600 – 1200 ℓ water/ha.</p> <p>Verseker deeglike bedekking van plante.</p> <hr/> <p>Dien Protector 400 SC toe in 'n voorkomende spuitprogram, in 14 dae intervalle, met 'n maksimum van drie Protector 400 SC toedienings per seisoen. Wissel Protector 400 SC toedienings af met swamdoders vanuit ander FRAC groepe.</p> <p>Verseker deeglike bedekking van plante.</p>

<p>UIE en KNOFFEL Alternaria vlek (<i>Alternaria porri</i>) en <i>Botrytis</i> spp.</p>	<p>150 mℓ / 100 ℓ</p>	<p>Dien Protector 400 SC in 'n voorkomende swamdoder spuitprogram toe, met intervalle van 14 dae. Moenie Protector 400 SC meer as drie keer per seisoen toedien nie. Wissel Protector 400 SC af met middels uit ander swamdoder groepkodes. Dien 'n minimum van 750 mℓ Protector 400 SC/ha toe. Verseker deeglike bedekking van loof, bo-, sowel as onderkant van blare.</p>
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Constrictor 250 EC (Reg. Nr. L10457, Wet 36 van 1947) is 'n geregistreerde produk van ICA International Chemicals.

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