



# SAMURAI® 20 SC

Reg. No. / Nr. L10384 Act / Wet No. / Nr. 36 of / van 1947

<b>READ THE LABEL BEFORE USE AND READ ATTACHED PACKAGED LEAFLET BEFORE USE AND KEEP OUT OF REACH OF CHILDREN AND ANIMALS.</b>	<b>LEES DIE ETIKET VOOR GEBRUIK EN LEES AANGEHEGDE VOUBILJET VOOR GEBRUIK EN HOU BUIITE BEREIK VAN KINDERS EN DIERE.</b>
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<b>INSECTICIDE GROUP CODE</b>	<b>4A</b>	<b>INSEKDODER GROEPKODE</b>
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A systemic suspension concentrate insecticide for the control of insect pests in citrus, grapes, bananas and macadamias as listed.	'n Sistemiese suspensie konsentraat insekdoder vir die beheer van plaë in sitrus, druiwe, piesangs en makadamia's soos aangedui.
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### Hazard Statements:

Suspected of damaging fertility. Suspected of damaging the unborn child.  
 Causes damage to organs (Central Nervous System).  
 Very toxic to aquatic life with long lasting effects.



**DANGER / GEVAAR**

### Gevaarverklarings:

Vermoede dat dit vrugbaarheid of die ongebore kind beskadig.  
 Veroorsaak skade aan organe (Sentrale Senuweestelsel).  
 Baie giftig vir waterlewende organismes met langdurige gevolge.

### Precautionary Statements:

Wear protective gloves, protective clothing, eye protection and face protection.  
 Avoid release to the environment – if this is not the intended use.

### Voorsorgverklarings:

Dra beskermende handskoene, beskermende klere, oogbeskerming en gesigbeskerming.  
 Vermy vrystelling in die omgewing - as dit nie die beoogde gebruik is nie

### Active Ingredient / Aktiewe Bestanddeel

**Clothianidin (Neonicotinoid)**

**200 g/L**

**Klotianidien (Neonikotinoïed)**

Net volume

Netto volume

### REGISTRATION HOLDER / REGISTRASIEHOUER

PHILAGRO SOUTH AFRICA (PTY) LTD / (EDMS) BPK

REG NO 1998/010658/07 REG NR

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**SAMURAI** is the registered trade mark / is die geregistreerde handelsmerk van **Sumitomo Chemical Company, Tokyo, Japan**

Batch No.

Lot Nr.

Date of Manufacture

Datum van Vervaardiging

UN No. / VN No. 3082

Emergency Numbers / Noodnommers:

Griffon Poison Information Centre:

+27(0) 82 446 8946

Poisons Information Centre:

+27(0) 86 155 5777

## WARNINGS:

### GHS Hazard Statements:

Suspected of damaging fertility. Suspected of damaging the unborn child.

Causes damage to organs (Central Nervous System).

Very toxic to aquatic life with long lasting effects.

Handle with care.

Harmful when ingested, inhaled or absorbed through skin.

Store away from food and feeds and out of reach of children, uninformed persons and animals.

**Extremely toxic to bees. Do not apply SAMURAI 20 SC in orchards or vineyards when bees are active or where flowering weeds are present. Prevent spray drift onto adjacent areas where bees may be present or active.**

### ALLOW THE FOLLOWING NUMBER OF DAYS BETWEEN LAST APPLICATION AND HARVEST:

Bananas \_\_\_\_\_ 200 days (Apply to main sucker (daughter plant) when 1.25 to 1.5m high after bunch of main plant has been harvested).

Grapes (Table and Wine) \_\_\_\_\_ 90 days (Apply not later than 80% bud burst).

Citrus \_\_\_\_\_ 120 days

Macadamias \_\_\_\_\_ 56 days

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

### DISCLAIMER:

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; compatibility with other substances not indicated on the label and the occurrence of resistance of the insect against the remedy concerned as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for lack of performance of the remedy concerned due to failure of the user to follow the label instructions or to the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier or registration holder in the event of any uncertainty.

### PRECAUTIONS:

#### GHS Precautions

##### Prevention

Obtain, read, and follow all safety instructions before use.

Do not breathe vapours/spray.

Wash hands and face thoroughly after handling.

Do not eat, drink, or smoke when using this product.

Avoid release to the environment – if this is not the intended use.

Wear protective gloves, protective clothing, eye protection and face protection.

##### Response

Collect spillage.

IF exposed or concerned: Get emergency medical help immediately.

##### Storage

Store locked up.

##### Disposal

Dispose of contents or container to an approved waste disposal facility and in accordance with national regulations.

Wash contaminated clothing daily.

In case of contact with eyes, wash immediately with plenty of clean water and seek medical advice.

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

Clean applicator after use. Dispose of wash water where no contamination of dams, rivers, grazing or crops can occur.

Prevent spray from drifting to other crops, grazing and dams, and areas not under treatment.

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 in the prescribed manner.

**RELEVANT SUBSTANCES:**

Hazardous Component	CAS Number	Weight - %	GHS Classification
Clothianidin	210880-92-5	20%	Acute Toxicity, Oral, Category 4. Reproductive Toxicity, Category 2. STOT SE, Category 1. Aquatic Toxicity, Acute, Category 1. Aquatic Toxicity, Chronic, Category 1.

**NOTE:** The other ingredients not included above, do not cause or contribute towards the correct GHS classification of **SAMURAI 20 SC** and are therefore, in terms of the South African Regulations for Hazardous Chemical Agents - 2021; Regulation 14(b), not listed.

**FIRST AID:****General Advice**

Immediately remove contaminated clothing and move the affected person from the contamination area. Keep the person warm, calm, and covered up. First aid personnel should pay attention to their own safety. In case of accident or if unwell, seek medical advice. Provide the SDS and the label to medical personnel for treatment.

**Eye Contact**

Rinse/flush the eyes gently with water from the eye wash fountain for several minutes (at least 15 minutes), while holding the eyelids apart. If relevant - remove contact lenses if easy to do so. Continue rinsing. Obtain medical attention in case of irritation or discomfort that occurs and persists.

**Skin Contact**

Immediately remove all contaminated clothing. Rinse the skin with plenty of cold water for 15 to 20 minutes under the safety shower. Do not rub the skin. Contact a poison control center or medical practitioner if irritation occurs and persists. Wash contaminated clothing before re-use.

**Inhalation**

Remove the affected victim from exposure to an area with fresh air. If breathing is difficult have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the product; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If the patient is conscious, rinse nose, mouth, and throat with water.

**Ingestion**

If swallowed, seek medical attention, and show the container label, or the Safety Data Sheet to the medical practitioner. If conscious, rinse mouth with water. Never give anything by mouth to an unconscious or convulsing person. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Treat symptomatically and supportively. For advice, contact a Poisons Centre or a medical practitioner.

**Medical Advice**

No specific antidote. Symptomatic treatment and supportive therapy as indicated.

**RESISTANCE WARNING STATEMENT:**

**SAMURAI 20 SC** is a group code 4A insecticide. Any insect population may contain individuals naturally resistant to **SAMURAI 20 SC** and other group code 4A insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. The resistant insects may not be controlled by **SAMURAI 20 SC** or any other group code 4A insecticide.

To delay insecticide resistance:

- Avoid exclusive repeated use of insecticides from the same insecticide group code. Alternate or tank mix with products from different insecticide group codes.
- Integrate other control methods (chemical, biological, cultural) in an insecticide control programme.

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

**DIRECTIONS FOR USE: USE ONLY AS DIRECTED****COMPATIBILITY:**

**SAMURAI 20 SC** is compatible with BP Medium Spray Oil (Reg. No. L6491), Nemesis 100 EC (Reg. No. L6378), Nemesis (Reg. No. L7099) in citrus and with Sumi-Alpha 200 EW (Reg. No. L8821) in macadamias.

**MIXING INSTRUCTIONS**

Half fill the spray tank with clean water. Add the required quantity of **SAMURAI 20 SC**. Fill the spray tank with water as well as the amount of oil needed to the required level while maintaining agitation to ensure thorough mixing of the spray mixture before spraying commences. Maintain agitation while spraying. Prepared spray mixture must not be left overnight in the spray tank. Ensure that agitation takes place for a few minutes prior to commencement of spraying after normal operational stops e.g. lunch break.

## APPLICATION INSTRUCTIONS

1. To control citrus thrips the product should be applied as a light cover spray.
2. For the control of mealybug, a full cover application is required, ensuring that all above-ground parts of the tree are thoroughly wetted with spray mixture. N.B. Please note that when applications aimed at the control of citrus black spot are made, the application volumes are not sufficient (high enough) to control mealybug with **SAMURAI 20 SC**.
3. In order to accurately determine the application volume that should be used, please use the following calculation method:

Calculating the application volume:

### 3.1 Spray factor

	Light cover spray	Heavy cover spray
-Dense foliage (e.g. Grape fruit)	1,3	4,0
-Medium foliage (e.g. Valencias/Navels)	1,1	3,33
-Light foliage (young trees, etc.)	0,9	2,67

### 3.2 Calculating the volume per 1 metre canopy height per 100m:

-If the spray factor is 3,33:

$$-3,33\text{l} \times 1\text{m} \times 100\text{m} = 330\text{l} / \text{metre height} / 100\text{m}$$

### 3.3 If canopy height is 2,5m and row spacing is 5m (20 rows / 100m) the application volume:

$$-333\text{l} \times 2,5\text{m} \times 20 = 16\,500 \text{ litres water/ha}$$

CROP & PEST	DOSAGE PER 100ℓ WATER	REMARKS
<b>BANANAS</b> <b>WEEVIL</b> <b>(<i>Cosmopolites sordidus</i>)</b>	<p>Injection into main sucker (daughter plant): 3ml per sucker</p> <p>Stem treatment of main sucker (daughter plant): 4.5ml per sucker directed towards the base in a spray volume of 10ml per sucker.</p>	<p>Application timing: Apply to main sucker (daughter plant) when it reaches a height of between 1.25 to 1.5m and after the bunch of mother plant is removed (preferably within one month).</p> <p>Injection into main sucker (daughter plant): Inject undiluted into main sucker (daughter plant) at a height of 150mm above the soil surface. The injection apparatus should be directed downwards and injected approximately 40mm deep in the surrounding leaf base and not into the centre of the sucker.</p> <p>Stem treatment of main sucker (daughter plant): Only apply to green (active growing) main sucker (daughter plant). Do not apply if rain is forecasted within 24 hours. Do not irrigate orchards for at least 24 hours after application.</p>

CROP & PEST	DOSAGE PER 100ℓ WATER	REMARKS
<p><b>CITRUS MEALY BUG</b> <i>(Planococcus citri)</i> and <b>CITRUS THRIPS</b> <i>(Scirtothrips aurantii)</i></p>	<p>15mℓ</p>	<p>Apply as a single full cover application at 100% petal fall. Ensure thorough application of young fruit.</p> <p>Follow up treatment with a registered mealy bug insecticide 14 to 21 days later in orchards with a history of mealy bug infestation or high infestation levels.</p> <p><b>SAMURAI 20 SC</b> will control first, second and third instar Africa bollworm present during application, but later developed instar larvae will probably not be controlled.</p> <p>Regular orchard inspections should be carried out post application of <b>SAMURAI 20 SC</b> and registered pesticides should be applied against insect pests present.</p>
<p><b>GRAPES (Table and Wine Grapes)</b> <b>MEALY BUG</b> <i>(Planococcus species)</i></p>	<p>Stem treatment: 0.1mℓ applied in 500mℓ water per vine.</p>	<p>Apply as a single application to the stem <b>no later than 80%</b> bud burst with a Calibra applicator or hand held vertical spray boom with full cone nozzles, ensuring good coverage of total stem base circumference to the point where the bark is drenched on all sides up to a height of 50cm. <b>Apply in a spray volume of 500ml per vine.</b> Monitor the vines at regular intervals from approximately four weeks after application for first signs of crawler movement. If any crawler movement is detected, apply a foliar application of an insecticide from a different mode of action (IRAC group code) which is registered for mealy bug control in grapes adhering to the label recommendations of such an insecticide.</p>

CROP & PEST	DOSAGE PER 100ℓ WATER	REMARKS
<p><b>MACADAMIAS</b>  <b>STINK BUG COMPLEX</b>  <b>Two Spotted Stinkbug</b>  <i>(Bathycoelia distincta)</i>  <b>Coconut bug</b>  <i>(Pseudotheraptus wayi)</i>  <b>Yellow Edged stinkbug</b>  <i>(Chinavia pallidoconspersa)</i></p>	<p>5mℓ <b>SAMURAI 20 SC</b>  + 2mℓ <b>SUMI-ALPHA 200 EW</b></p>	<p>Apply as a full cover spray. Start the spray program for stink bug control during late October to early November and apply at least 4 sprays at monthly intervals, utilizing different mode of action insecticides to control this pest complex. Only apply the <b>SAMURAI 20 SC + SUMI-ALPHA 200 EW</b> tank mixture spray as a block application consisting of two consecutive sprays. Do not apply more than two <b>SAMURAI 20 SC + SUMI-ALPHA 200 EW</b> tank mixture sprays per season and do not alternate with any pyrethroid (or pyrethroid containing) insecticide sprays.</p> <p>If <b>SAMURAI 20 SC + SUMI-ALPHA 200 EW</b> tank mixture spray was the last spray of the previous season for stink bug control, use an alternative mode of action insecticide for the first stink bug spray the following season. <b>Do not apply the SAMURAI 20 SC + SUMI-ALPHA 200 EW tank mixture in macadamia orchards where insecticides containing the active ingredient thiamethoxam is or was applied as a drench application during the same season OR where any other IRAC group 4A mode of action insecticides are applied during the same season as foliar or soil drench applications for any macadamia pests. See important notes below concerning bees and bee safety.</b></p>
<p><b>Important notes concerning bees and bee safety:</b></p> <ol style="list-style-type: none"> <li>1. The active ingredients in <b>SAMURAI 20 SC</b> and <b>SUMI-ALPHA 200 EW</b>, clothianidin and esfenvalerate respectively are toxic to honeybees.</li> <li>2. Therefore, apply <b>SAMURAI 20 SC + SUMI-ALPHA 200 EW</b> tank mixture <b>only post-flowering when bees are no longer active in the orchards</b> and when there <b>are no flowering weeds</b> in or on the verges of the macadamia orchards.</li> <li>3. <b>Aerial Application of SAMURAI 20 SC + SUMI-ALPHA 200 EW tank mixture is strictly prohibited under any circumstances.</b></li> </ol>		

## WAARSKUWINGS:

### GHS Gevaarverklarings:

Vermoede dat dit vrugbaarheid of die ongebore kind beskadig.  
Veroorsaak skade aan organe (Sentrale Senuweestelsel).  
Baie giftig vir waterlewende organismes met langdurige gevolge.

Hanteer versigtig.

Skadelik wanneer ingeasem, ingeneem of deur vel geabsorbeer.

Bewaar weg van voedsel en voer en buite bereik van kinders, oningeligte persone en diere.

**Uiters giftig vir bye. Moet nie SAMURAI 20SC toedien in boorde of wingerde wanneer bye teenwoordig of aktief is nie of waar daar onkruid in blom teenwoordig is nie. Vermy die wegdryf van spuitnewel na aangrensende areas waar bye teenwoordig of aktief is.**

### DIE VOLGENDE AANTAL DAE MOET VERLOOP TUSSEN LAASTE TOEDIENING EN OES:

Piesangs \_\_\_\_\_ 200 dae (Toediening aan hoofsuier (dogterplant) wanneer 1,25 tot 1,5 m hoog nadat tros van moederplant ge-oes is)).

Druive (Tafel en Wyn) \_\_\_\_\_ 90 dae (Toediening nie later as 80% bot nie)).

Sitrus \_\_\_\_\_ 120 dae

Makadamias \_\_\_\_\_ 56 dae

**Herbetreding:** Moet nie die behandelde gebied betree vir 1 dag na die bespuiting nie, tensy beskermende oorklere gedra word.

### VRYWARING:

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 klimaats- en bergingstoestande; verenigbaarheid met ander stowwe wat nie op die etiket aangedui is nie en die voorkoms van weerstand van die insek teen die betrokke middel sowel as die metode, tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei, die omgewing of vir nadelige effek op mens of dier of vir 'n gebrek aan prestasie van die betrokke middel as gevolg van die versuim van die gebruiker om etiketaanwysings na te kom of as gevolg van die ontstaan van toestande wat nie kragtens die registrasie voorsien kon word nie. Raadpleeg die verskaffer of registrasiehouer in die geval van enige onsekerheid.

### VOORSORGMAATREËLS:

#### GHS Voorsorgmaatreëls:

##### Voorkomende

Verkry, lees en volg alle veiligheidsinstruksies voor gebruik.

Moet nie dampe/spuitstof inasem nie.

Was hande en gesig deeglik na hantering.

Moet nie eet, drink of rook wanneer hierdie produk gebruik word nie.

Vermyn vrystelling in die omgewing - as dit nie die beoogde gebruik is nie.

Dra beskermende handskoene, beskermende klere, oogbeskerming en gesigbeskerming.

##### Reaksie

Maak stortsel bymekaar.

INDIEN blootgestel of besorg: Kry onmiddellik mediese noodhulp.

##### Bergingvoorsorg

Berg agter slot en grendel.

##### Ontslaeraak (wegdoen)

Raak ontslae van inhoud of houer deur gebruik te maak van 'n goedgekeurde afvalverwyderingsfasiliteit, in ooreenstemming met nasionale regulasies.

Was besoedelde klere daaglik.

In geval dit met die oë in aanraking kom, spoel onmiddellik uit met volop skoon water en spreek 'n geneesheer.

Voorkom besoedeling van voedsel, voer, eetgerei en drinkwater.

Maak spuitapparaat skoon na gebruik. Raak ontslae van uitspoelwater waar dit nie damme, riviere, weiding of gewasse sal besoedel nie.

Verhoed dat spuitnewel wegdryf na ander gewasse, weiding, riviere en damme en areas nie onder behandeling nie.

Spoel leë houer driekeer uit met 'n volume water gelykstaande aan 'n minimum van 10% van die houer. Gooi die spoelwater by die inhoud van die spuittenk voordat die houer op die voorgeskrewe wyse vernietig word.

**RELEVANTE BESTANDDELE:**

Gevaarlike Komponent	CAS Nommer	Massa %	GHS Klassifikasie
Klotianidien	210880-92-5	20%	Akute Giftigheid, Mondelings, Kategorie 4. Voortplantingsgiftigheid, Kategorie 2. STOT, Eenmalige blootstelling, Kategorie 1. Gevaarlik vir die Wateromgewing, Akute, Kategorie 1. Gevaarlik vir die Wateromgewing, Chronies, Kategorie 1.

**LET WEL:** Die ander bestanddele wat nie hierbo ingesluit is nie, veroorsaak of dra nie by tot die korrekte GHS-klassifikasie van **SAMURAI 20 SC** nie en is dus in terme van die Suid-Afrikaanse Regulasie vir Gevaarlike Chemiese Middels - 2021; Regulasie 14(b), nie gelys nie.

**NOODHULP:****Algemene advies**

Verwyder besoedelde klere onmiddellik en verwyder die geaffekteerde persoon uit die besoedelde area. Hou die persoon warm, kalm en bedek. Noodhulppersoneel moet aandag gee aan hulle eie veiligheid. In die geval van 'n ongeluk of as jy siek voel, verkry mediese advies. Voorsien die SDS en die etiket aan mediese personeel vir behandeling.

**Oogkontak**

Spoel oë onmiddellik en sagtens uit met water deur oë met lopende water uit te spoel vir etlike minute (ten minste 15 minute), terwyl die ooglede uitmekaar gehou word. Indien tersaaklik - verwyder kontaklense indien dit maklik is om dit te doen. Gaan voort om te spoel. Verkry mediese hulp indien irritasie of ongemak voorkom en voortduur.

**Velkontak**

Verwyder alle besoedelde klere onmiddellik. Spoel die vel vir 15 tot 20 minute met koue water af in 'n veiligheidsstort. Moenie die vel hard vryf nie. Kontak 'n gifbeheersentrum of 'n mediese praktisyn indien irritasie voorkom en voortduur. Was besoedelde klere voor hergebruik.

**Inaseming**

Verwyder die geaffekteerde slagoffer onmiddellik van blootstelling na 'n area met vars lug. Laat gekwalifiseerde personeel suurstof toedien, indien asemhaling moeilik is. Dien kunsmatige asemhaling toe, indien asemhaling gestop het. Moetnie mond-tot-mond-asemhaling toedien wanneer die slagoffer die produk ingeneem of ingeasem het nie; dien kunsmatige asemhaling toe deur gebruik te maak van 'n sakmasker toegerus met 'n eenrigtingklep of ander toepaslike respiratoriese mediese toestel. Indien die pasiënt nie bewusteloos is nie, spoel neus, mond en keel uit met water.

**Inname**

Indien ingesluk, verkry mediese hulp en wys die etiket of SDS aan mediese praktisyn. Indien by bewussyn, spoel mond uit met water. Moet nooit iets per mond aan 'n bewustelose persoon of 'n persoon wat stuiptrekkings toon, gee nie. Moet nie braking veroorsaak nie. Indien braking voorkom, hou kop laag sodat maaginhoud nie in die longe kom nie. Behandel simptome en ondersteunend. Kontak 'n gifinligtingsentrum of 'n mediese praktisyn vir advies.

**Mediese Advies**

Geen spesifieke teenmiddel nie. Behandel simptome en ondersteunend soos aangedui.

**WEERSTANDSWAARSKUWING:**

**SAMURAI 20 SC** is 'n groeppkode 4A insekdoder. Enige populasie van 'n spesifieke insek mag individue insluit wat 'n natuurlike weerstand teen **SAMURAI 20 SC** of enige ander groeppkode 4A insekdoder het. Indien hierdie insekdoders herhaaldelik aangewend word, kan die weerstandbiedende individue uiteindelik die insekpopulasie oorheers. Hierdie weerstandbiedende insekte sal waarskynlik nie deur **SAMURAI 20 SC** of enige ander groeppkode 4A insekdoder beheer word nie.

Om weerstand teen insekdoders te vertraag:

- Vermyn die eksklusiewe herhaaldelike gebruik van insekdoders met dieselfde groeppkode. Wissel af met, of maak tenkmengsels van produkte in verskillende insekdodergroeppcodes.
- Integreer ander beheermaatreëls (chemies, biologies, verbouing) in insekdoder beheerprogramme.

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

**GEBRUIKSAANWYSINGS: GEBRUIK SOOS AANGEDUI.****VERENIGBAARHEID:**

**SAMURAI 20 SC** is verenigbaar met BP Medium Spray Oil (Reg. Nr. L6491), Nemesis 100 EC (Reg. Nr. L6378), Nemesis (Reg. Nr. L7099) in sitrus en Sumi-Alpha 200 EW (Reg. Nr. L8821) in makadamia's.



## MENGINSTRUKSIES

Maak die spuittenk halfvol met skoon water. Voeg die korrekte hoeveelheid **SAMURAI 20 SC** by. Maak die spuittenk vol tot by die verlangde vlak met water en die korrekte hoeveelheid olie waar nodig, terwyl daar voortdurend geroer word om deeglike vermenging van die spuitmengsel te verseker voordat bespuit word. Roering moet volgehou word terwyl bespuiting plaasvind. Voorbereide spuitmengsel moet nie oornag in die spuittenk gelos word nie. Verseker dat roering plaasvind vir 'n paar minute voor bespuiting hervat word na normale operasionele pouses bv. middagete.

## TOEDIENINGSINSTRUKSIES

1. Om sitrusblaaspoetjies te beheer is 'n ligte dekbespuiting voldoende.
2. Vir die beheer van witluis moet 'n voldekbepuiting uitgevoer word, waartydens die raamtakke deeglik natgespuit word. L.W.: Bespuitingsvolumes toegedien met die doel om swartvlek te beheer, is nie voldoende (hoog genoeg) vir die beheer van witluis met **SAMURAI 20 SC** nie.
3. Om die watervolume akkuraat te bepaal, volg asseblief die berekening soos hieronder aangedui:

Bepaling van die spuitvolume::

### 3.1 Spuitfaktor

	Ligtedekbespuiting	Voldekbepuiting
-Digte blaarbedekking (bv. Pomelo's)	1,3	4,0
-Medium blaarbedekking (bv. Valencias/Nawels)	1,1	3,33
-Ligte blaarbedekking (jong bome, ens.)	0,9	2,67

### 3.2 Bepaling van spuitvolume per 1 meter blaardak per 100 meter:

-As spuitfaktor 3,33 is:

$$-3,33\ell \times 1\text{m} \times 100\text{m} = 330\ell / \text{metre hoogte} / 100\text{m}$$

### 3.3 As blaardak 2,5 m hoog is en ryspasiëring is 5 m (20 rye / 100 m) dan is spuitvolume

$$-333\ell \times 2,5\text{m} \times 20\text{m} = 16\,500\ell \text{ water} / \text{ha.}$$

GEWAS EN PLAAG	DOSIS PER 100ℓ WATER	OPMERKINGS
<b>PIESANGS SNUITKEWER / KALANDER (<i>Cosmopolites sordidus</i>)</b>	Inspuiting in hoofsuier (dogter plant): 3ml per suier  Stambehandeling van hoofsuier (dogterplant): 4,5ml per suier gerig na suierbasis in 'n spuitvolume van 10ml water per suier.	Toedieningstyd: Dien op die hoofsuier (dogterplant) toe wanneer dit 1,25 tot 1,5 m hoog is en nadat die tros van die moederplant geoes is (verkieslik binne 'n maand).  Suier-inspuiting: Spuit onverdund binne die hoofsuier (dogterplant) ongeveer 150mm bo die grondoppervlak. Die inspuitingsapparaat moet afwaarts gerig word ongeveer 40mm diep binne die buite blaarbasis en nie in die kern van die suier nie.  Suier-stambehandeling: Dien slegs op groen (aktief groeiende) hoofsuier (dogterplant) toe. Moet nie toedien as reën binne 24 uur verwag word nie. Moet ook nie boorde besproei vir ten minste 24 uur na afloop van toediening nie.

GEWAS EN PLAAG	DOSIS PER 100ℓ WATER	OPMERKINGS
<p><b>SITRUS WITLUIS</b> <i>(Planococcus citri)</i> en <b>SITRUSBLAASPOOTJIES</b> <i>(Scirtothrips aurantii)</i></p>	<p>15mℓ</p>	<p>Dien toe as 'n voldektoediening by 100% blomblaarval. Verseker deeglike benatting van die jong vruggies.</p> <p>Opvolgbespuiting met 'n geregistreerde witluis insekdoder 14 tot 21 dae mag nodig wees in 'n boord met 'n geskiedenis van witluis probleme, hoë infestasielakke.</p> <p><b>SAMURAI 20SC</b> sal eerste, tweede en derde instar Afrika bolwurms wat teenwoordig is beheer tydens 'n toediening, maar latere ontwikkelde instars sal waarskynlik nie beheer word nie.</p> <p>Na toediening van <b>SAMURAI 20 SC</b> moet gereelde boordinspeksies uitgevoer word, en geregistreerde plaagdoders moet aangewend word indien plaaginsekte opgemerk word.</p>
<p><b>DRUIWE</b> <b>(Tafel- en Wyndruiwe)</b> <b>WITLUIS</b> <i>(Planococcus species)</i></p>	<p>Stam behandeling: 0,1mℓ toegedien in 500mℓ water per stam toe.</p>	<p>Dien <b>nie later as 80 %</b> bot toe as 'n eenmalige stambehandeling met 'n Calibra toediener, of handgehoude vertikale spuitbalk met volkeel spuitpunte wat bedekking van die totale omtrek van die stambasis tot op 'n hoogte van 50cm bo die grondoppervlak verseker tot op die punt dat die bas deurdrenk van all kante.</p> <p><b>Dien toe in 'n spuitvolume van 500 mℓ per wingerdstok.</b> Moniteer die druiwe op gereelde intervalle vanaf ongeveer vier weke na toediening vir enige tekens van kruiperbeweging. Volg op met 'n looftoediening met 'n insekdoder met 'n verskillende IRAC groep kode meganisme van werking, wat teen witluis op druiwe geregistreer is volgens etiket aanbevelings van laasgenoemde insekdoder toe, sodra daar enige tekens van kruiperbeweging sigbaar is.</p>

GEWAS EN PLAAG	DOSIS PER 100ℓ WATER	OPMERKINGS
<p><b>MAKADAMIAS</b>  <b>STINKBESIEKOMPLEKS</b>  <b>Tweekolstinkbesie</b>  <i>(Bathycoelia distincta)</i>  <b>Kokosneutbesie</b>  <i>(Pseudotheraptus wayi)</i>  <b>Geelrandstinkbesie</b>  <i>(Chinavia pallidoconsersa)</i></p>	<p>5ml <b>SAMURAI 20 SC</b>  + 2ml <b>SUMI-ALPHA 200 EW</b></p>	<p>Dien as 'n volle dekbespuiting toe. Begin die spuitprogram vir stinkbesie beheer gedurende laat Oktober tot vroeg November en dien ten minste 4 bespuitings met maandelikse tussenposes toe, deur gebruik te maak van insekdoders met verskillende meganismes van werking ten einde die plaagkompleks te beheer. Dien <b>SAMURAI 20 SC + SUMI-ALPHA 200 EW</b> tenkmengsel as twee rug-aan-rug bespuitings (blokbespuiting) toe. Moet nie meer as twee <b>SAMURAI 20 SC + SUMI-ALPHA 200 EW</b> tenkmengsel toedienings per seisoen toedien nie en moet nie afwissel met enige piretroïed (of piretroïed bevattende) insekdoder- bespuitings nie.</p> <p>Gebruik 'n insekdoder met 'n alternatiewe meganisme van werking vir die eerste stinkbesie bespuiting van die daaropvolgende seisoen indien <b>SAMURAI 20 SC + SUMI-ALPHA 200 EW</b> tenkmengsel die laaste bespuiting van die vorige seisoen vir stinkbesie beheer was. <b>Moet nie die SAMURAI 20 SC + SUMI-ALPHA 200 EW tenkmengsel toedien in makadamia boorde waar insekdoders wat die aktiewe bestanddeel tiametoksam bevat, as 'n gronddeurdreking behandeling, tydens dieselfde seisoen toegedien is of word, OF waar enige ander IRAC groep kode 4A meganisme van werking insekdoder gedurende dieselfde seisoen as of 'n gronddeurdreking of 'n loof behandeling toegedien is teen enige makadamia plaë nie. Sien belangrike nota's hieronder aangaande bye en bye veiligheid.</b></p>
<p><b>Belangrike nota's aangaande bye en bye veiligheid:</b></p> <ol style="list-style-type: none"> <li>1. Die aktiewe bestanddele in <b>SAMURAI 20 SC</b> en <b>SUMI-ALPHA 200 EW</b>, klothianidien and esfenvaleraat respektiwelik, is giftig vir heuningbye.</li> <li>2. Dus, dien die <b>SAMURAI 20 SC + SUMI-ALPHA 200 EW</b> tenkmengsel <b>slegs na blom toe, wanneer bye nie meer aktief in boorde is nie</b> en wanneer daar <b>geen blommende onkruid</b> in, of op die kante van die makadamiaboorde is nie.</li> <li>3. <b>Lugtoediening van SAMURAI 20 SC + SUMI-ALPHA 200 EW tenkmengsel word onder alle toestande teen strengste verbied.</b></li> </ol>		