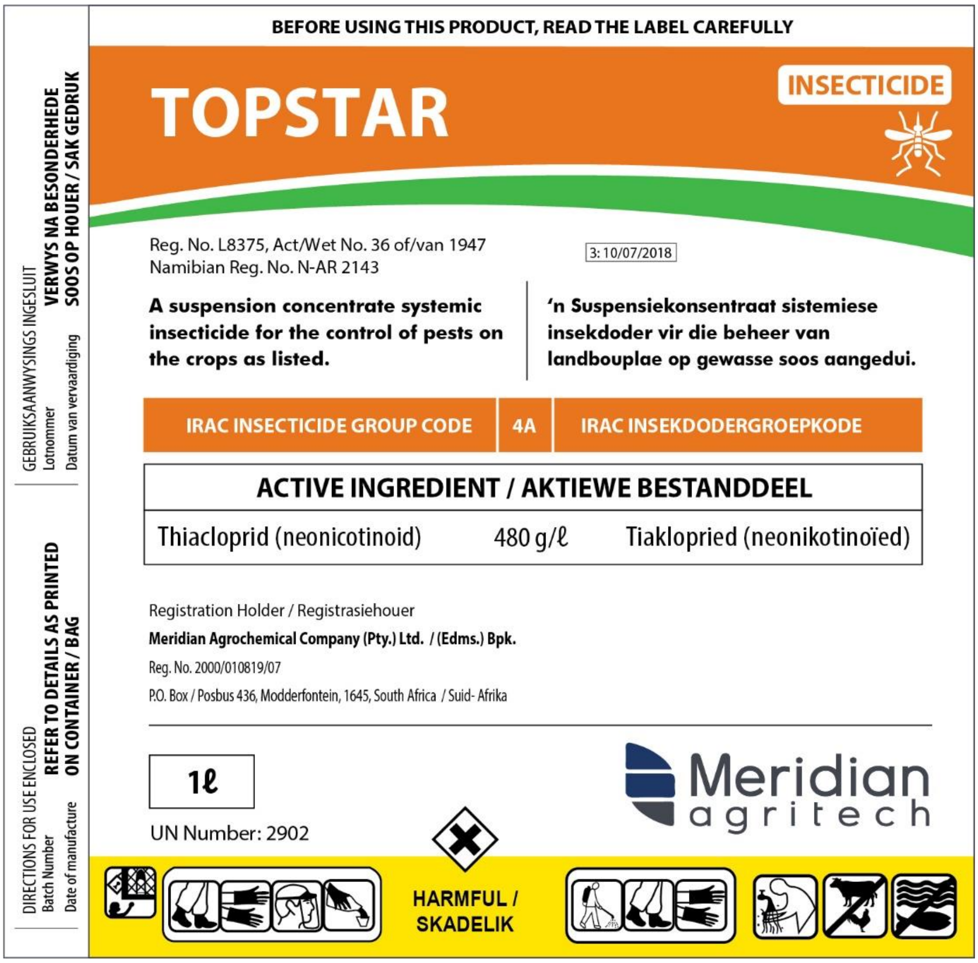
TOPSTAR


BEFORE USING THIS PRODUCT, READ THE LABEL CAREFULLY
TOPSTAR
INSECTICIDE
Reg. No. L8375, Act/Wet No. 36 of/van 1947
Namibian Reg. No. N-AR 2143
3: 10/07/2018
A suspension concentrate systemic insecticide for the control of pests on the crops as listed.
'n Suspensiekonsentraat sistemiese insekdoder vir die beheer van landbouplae op gewasse soos aangedui.
IRAC INSECTICIDE GROUP CODE
4A
IRAC INSEKDODERGROEPKODE
ACTIVE INGREDIENT / AKTIEWE BESTANDDEEL
Thiacloprid (neonicotinoid)
480 g/ℓ
Tiaklopried (neonikotinoïed)
Registration Holder / Registrasiehouer
Meridian Agrochemical Company (Pty.) Ltd. / (Edms.) Bpk.
Reg. No. 2000/010819/07
P.O. Box / Posbus 436, Modderfontein, 1645, South Africa / Suid- Afrika
1ℓ
UN Number: 2902
HARMFUL / SKADELIK
DIRECTIONS FOR USE ENCLOSED
REFER TO DETAILS AS PRINTED ON CONTAINER / BAG
Batch Number
Date of manufacture
GEBRUIKSAANWYSINGS INGESLUIT
VERWYS NA BESONDERHEDE SOOS OP HOUER / SAK GEDRUK
Lotnommer
Datum van vervaardiging

WARNINGS

Withholding period:
Allow the following minimum number of days between last treatment and harvest:

Apples and Pears……………………………………………………..…………………………..……..…14 days
Peaches and Nectarines……………………………………………………………...………..……….60 days
Citrus……………………………..…………………………….……do not apply later than 21 days after petal fall
Berries ……………………..……………………………………….……………………………………14 days

IMPORTANT: The recommended withholding period between last application and harvest meets local residue requirements, but may not meet export requirements.

- Handle with care.
- Irritating to the skin and eyes.
- Harmful by swallowing.
- Toxic to fish and wildlife. Avoid contamination of water bodies. Apply strictly according to instructions in order to prevent damage to aquatic systems.
- This product is not toxic to adult honey bees, but may be harmful to the brood.
- Store in a cool, dry place.
- Store away from food, feed, fertilizer and other agricultural products.
- Keep out of reach of children, uninformed persons and animals.
- Do not use this product in any way contrary to the directions on this label.
- **TOPSTAR** has been tested on the most important commercial cultivars without any phytotoxic effects. More susceptible cultivars may be released in future which need to be tested; for this apply **TOPSTAR** to a limited test area before commercial applications are made.
- **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/her.**

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be effective under all conditions. The activity 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 the pest against the remedy, 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 by 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 fumes or spray mist.
- Avoid skin and eye contact by wearing full protective clothing (protective gloves, boots and face shield) when mixing and applying the product.
- Wash with soap and cold water immediately after use and accidental skin contact as well as contaminated clothing.
- Wash contaminated clothing immediately after use.
- All persons in direct contact with the product, including markers must wear protective clothing as well as a suitable respirator.
- Do not eat, drink or smoke while mixing or applying the product or before washing hands and face and changing clothing.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean applicator after use. Dispose of rinsate where it will not contaminate crops, grazing, rivers, dams and boreholes.
- Prevent contamination of food, feeds, drinking water and eating utensils.
- Triple rinse empty container in the following manner: Invert the container over the spray tank or mixing tank and allow to drain for at least 30 seconds after flow has slowed down to a drip. Thereafter, rinse the empty container three times with a volume of water equal to a minimum 30% of that of the container. Add the rinsate to the contents of the spray tank before destroying the container.
- Destroy the empty container by perforation and flattening and dispose of it in a safe manner.
- **Never** re-use the empty container for any other purpose.

SYMPTOMS OF HUMAN POISONING

Apathetic state, depressed muscular tone, respiratory disturbances and trembling and muscular cramps in severe cases of poisoning.

FIRST AID TREATMENT

Skin contact: Remove patient from source of poisoning and keep him quiet and reassured. Remove contaminated clothing as well as shoes and leather goods. Wash body with non-abrasive soap and lots of water. Persons providing first aid must wear gloves to avoid self-contamination. Seek medical advice if necessary.
Eye contact: Flush eyes immediately with large amounts of clean water for approximately 15 minutes. Occasionally lift the upper and lower lids. If eye irritation persists, get medical attention.
Inhalation: Remove patient from source of poisoning to a well ventilated area and loosen clothing around the neck. Perform artificial respiration and administer oxygen if necessary. Keep patient warm and calm. **Seek medical advice immediately.**
Ingestion: If swallowed, induce vomiting by tickling the back part of the throat. Repeat until vomit fluid is clear and free from smell of poison. **Get medical attention immediately**. Administration of gastric lavage or oxygen should be performed by qualified medical personnel. Do not apply direct mouth to mouth respiration.

NOTE TO PHYSICIAN

Treat symptomatically and supportively. Keep patient under observation by checking blood pressure and pulse rate frequently (bradycardia and hypotonia possible). Provide support measures for respiratory and cardiac action. Give artificial respiration if signs of paralysis appear. Additional measures involve the elimination of the substance from the body or acceleration of its excretion (gastrolavage, saline laxatives). If product is aspirated into the lungs during ingestion or vomiting, chemical pneumonia may be caused. If vomiting occurs, take care to prevent vomit from being inhaled.

USE RESTRICTIONS

- Do not apply to any crop or situation not mentioned in this label.
- Do not apply this product in combination or tank mixture with any other product or agricultural remedy which is not specifically listed on this label. Meridian Agrochemical Company (Pty) Ltd accepts no responsibility for any negative effects experienced if the instructions on this label are not adhered to, unless a Meridian representative was consulted beforehand.
- Do not apply during the heat of the day or if rain is pending.
- All applications must be performed with correctly calibrated spray equipment that is in good working order and which will give the desired coverage of the target area.
- Ensure thorough penetration and droplet coverage.

RESISTANCE WARNING

For resistance management, **TOPSTAR** is a group code 4A insecticide. Any insect population may contain individuals naturally resistant to **TOPSTAR** and other group code 4A insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **TOPSTAR** 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 registered products from different insecticide group codes. Do not apply **TOPSTAR** or any other 4A product more than once per season in citrus.
- Integrate other control methods (chemical, cultural, biological) into insect control programmes.

Since the occurrence of resistance cannot be forecast, users are advised to keep treated crops under close observation. If treatment is not effective following the use of **TOPSTAR** as recommended, a resistant population may be present. If a resistant population is positively identified, consideration should be given to prompt use of an insecticide with a different mode of action for which there is no record of resistance to the relevant pest. For specific information on resistance management, contact the registration holder of this product.

MODE OF ACTION

Thiacloprid acts as an agonist of the nicotinic acetylcholine receptor in the central nervous system, thus disturbing synaptic signal transmissions. Thiacloprid is an acute contact and stomach poison, with systemic properties.

EMERGENCY REGISTRATIONS

The following were granted as emergency registrations: The control of Thrips *(Frankliniella occidentalis*) on Berries and other small fruits. Products which are approved for emergency registration are still undergoing evaluation for efficacy, selectivity and residues. Please note that human and environmental safety have already been approved.

DIRECTIONS FOR USE

Use only as directed.

MIXING INSTRUCTIONS

Half-fill the spray tank with suitable water. Shake the container thoroughly prior to use. Add the required quantity of **TOPSTAR** to the water in spray tank while agitating. Fill the spray tank to the desired volume with water. **Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank overnight**. Do not use brackish water. Spraying equipment must be thoroughly flushed out at the end of the spraying operation.

COMPATIBILITY

The compatibility of **TOPSTAR** with other products depends on the formulations of the respective products as well as the quality of the spray water to be used. As formulations change from time to time it is recommended that a physical compatibility test be done prior to the tank mixture being made. Do not make tank mixtures with other agricultural remedies or foliar feed products without first ensuring that no reduction in efficacy or crop damage will result. When mixing **TOPSTAR** with other products, follow all label instructions carefully. **TOPSTAR** is compatible with most pesticides used on apples and pears.

APPLICATION METHODS

Ensure that the equipment is correctly calibrated and is checked regularly during application to ensure even and accurate application. **Constant agitation throughout the spray operation is essential**. Only clean water should be used.

GROUND APPLICATION

- **TOPSTAR** can be applied with conventional high volume spraying equipment fitted with hollow cone nozzles to give medium to fine droplets. Calibrate the apparatus prior to application to ensure that the correct dosage is applied. Ensure that the distribution of the spray is uniform throughout the target area.
- Spray volumes must be adapted according to the size, growing pattern and leaf density of the crop. Use an appropriate spray volume to ensure thorough coverage and wetting of all the plant parts. Monitor efficacy within 3 days and reapply if necessary.

RECOMMENDATIONS

CROP/PEST	APPLICATION RATE	REMARKS
Apples and Pears Codling moth (*Cydia pomonella*)	15 mℓ / 100 ℓ water	Apply as a full cover spray. Thorough coverage is important. Commence application at the beginning of a moth generation or at ¾ petal fall (in the case of the first generation). Repeat at 14 day intervals for a maximum of **four** applications. To prevent or delay the development of resistance, products with other modes of action should be applied for the control of the other two generations of codling moth. If **TOPSTAR** is used for the control of the last generation of the season, a product with another mode of action should be used for the control of the first generation in the next season.
Berries (Blueberries, Blackberries, Cranberries, Dewberries (including boysenberries and loganberries), gooseberries, raspberries, blackcurrants and currants) Thrips (Including Western Flower Thrips: *Frankliniella occidentalis*)	30 mℓ / 100 ℓ water	Apply as a light cover spray at the first signs of Thrips infestation based on scouting. Ensure thorough, even coverage. Repeat as required for a maximum of 2 applications at 14 day intervals. If further applications are required, make use of registered insecticides with a different mode of action to **TOPSTAR.**
Citrus (excluding lemons and kumquat) Thrips (*Scirtothrips aurantii*) Aphids (*Toxoptera citricidus*)	30 mℓ + 250 mℓ medium spray oil / 100 ℓ water	Apply as a **single** light cover spray from 100 % petal fall and **not later than 3 weeks after petal fall** depending on infestation pressure based on scouting. Thorough coverage of the fruit is essential. Preceding and successive applications with other products registered against thrips may be necessary depending on infestation pressure based on scouting. **TOPSTAR** thus forms part of a thrips spray programme. Aphids present at the time of application will also be controlled.
Peaches and Nectarines Oriental fruit moth (*Cydia molesta*)	15 mℓ / 100 ℓ water	Apply one or more of the following high volume sprays with a maximum of 3 applications per season: Apply treatments between 278 and 333 degree days after each biofix*. In the case of a very high first generation moth flight / infestation, 2 treatments are recommended. Apply the first at 200 degree days and the second 10 – 14 days later. Monitor traps every 2 days until the biofix of the first generation has been determined and, thereafter, at weekly intervals. As each successive moth flight starts to decrease, monitor traps every two days until the start of the next flight, in order to accurately pinpoint biofix and then again at weekly intervals thereafter. Application of **TOPSTAR** for the control Oriental fruit moth (OFM) will also help to control Green Peach aphid (*Myzus persicae*). The **TOPSTAR** applications form part of an OFM control programme and further control applications should be carried out with non-related registered insecticides.

*Biofix is a term used to describe the start of each moth generation, It is the date on which the first sustained emergence of moths in each generation is recorded in pheromone traps (consulted your advisor if in doubt concerning the determination of the biofix).

Effects on beneficial insects: Citrus:
Aphytis linganensis – harmless
Chilocorus nigritus – very harmful
Coccidoxenoides peregrinus – very harmful
Euseius citri – harmless
Trichogrammatoidea cryptphlebiae – slightly harmful
Honeybees – harmless

Apples and pears:
Neoseiulus californicus – harmless
Oligota fageli – slightly harmful
Honeybees – harmless

WAARSKUWINGS

Onthoudingsperiode:
Die volgende aantal dae moet verloop tussen laaste toediening en oes:

Appels en pere……………………………………………………………………………………………14 dae
Perskes en Nektariens……………………………………………………………………………………60 dae
Sitrus…………………………………………….…moet nie later as 21 dae na blomblaarval toedien nie
Bessies…………………………………………………………………………………………………14 dae

BELANGRIK: Die aanbevole onthoudingsperiode tussen laaste toediening en oes voldoen aan die plaaslike residuvereistes, maar mag dalk nie vir uitvoer voldoende wees nie.

- Hanteer versigtig.
- Mag vel- en oogirritasie veroorsaak.
- Giftig indien ingesluk word.
- Giftig vir visse en wildlewe. Voorkom besoedeling van watergebiede. Gebruik streng volgens voorskrifte om skade aan waterlewe te voorkom.
- Hierdie produk is nie giftig teenoor volwasse heuningbye nie, maar mag skadelik teenoor onvolwassenes wees.
- Bêre weg van voedsel, voer, kunsmis en ander landbouprodukte.
- Hou buite bereik van kinders, oningeligte persone en diere.
- **TOPSTAR** is sonder enige fitotoksisiteitskade op die mees belangrikste kommersiële kultivars getoets. Meer vatbare kultivars mag in die toekoms vrygestel word wat eers getoets moet word; hiervoor moet **TOPSTAR** eers op ‘n klein toetsoppervlakte aangewend word, alvorens groot kommersiële bespuitings gemaak word.
- **Herbetreding:** Moenie die bespuite area binne 1 dag na die bespuiting betree nie, tensy beskermende oorklere gedra word.
- **In die geval van vergiftiging, ontbied ‘n geneesheer en toon etiket aan hom.**

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 bergingtoestande; verenigbaarheid met ander stowwe wat nie op die etiket aangedui is nie en die voorkoms van weerstand van die plaag 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 in die geval van enige onsekerheid.

VOORSORGMAATREËLS

- Vermy inaseming van spuitnewel.
- Vermy kontak met oë en vel deur beskermende oorklere (oorpak, rubberhandskoene, stewels en gesigskerm) te dra tydens vermenging en toediening van die produk.
- Dra beskermende klere en was besoedelde klere daagliks.
- Was met seep en koue water onmiddellik na gebruik en velkontak; so ook besoeldelde klere.
- Alle persone wat in aanraking kom met die produk, inlsuitend veldmerkers, moet beskermende oorklere sowel as ‘n geskikte respirator dra.
- Maak spuitapparaat skoon na gebruik. Raak ontslae van uitspoelwater waar dit nie damme, boorgate, riviere of gewasse sal besoedel nie.
- Moenie eet, drink of rook gedurende hantering, toediening en voordat hande en gesig gewas is nie.
- Verhoed dat spuitnewel wegdryf na ander gewasse, weiding, riviere, damme en areas wat nie onder behandeling is nie.
- Voorkom besoedeling van voedsel, voer, eetgerei en drinkwater.
- Leë houers moet drie keer uitgespoel word soos volg: Keer die leë houer om oor die spuittenk of mengbak en dreineer vir minstens 30 sekondes nadat die vloei tot 'n gedrup verminder het. Spoel die houer daarna **drie keer** uit met 'n volume water gelykstaande aan 'n minimum van 30% van die inhoud van die houer. Gooi die spoelwater by die inhoud van die spuittenk voordat die houer op die voorgeskrewe wyse vernietig word.

- Maak gate in leë houer en vernietig op ‘n verantwoordelike wyse. Moet vir geen ander doel weer gebruik nie.

SIMPTOME VAN MENSLIKE VERGIFTIGING
Lusteloosheid, verlaagde spierfunksie, asemhalingsversteurings, bewing en spierkrampe in gevalle van ernstige vergiftiging.

NOODHULPBEHANDELING
Velkontak: Verwyder persoon van die bron van vergiftiging, stel hom gerus en hou hom stil. Verwyder besoedelde klere sowel as skoene en leeritems. Was besoedelde vel deeglik met baie seep en groot hoeveelhede koue water. Mense wat noodhulp toepas moet handskoene dra om selfbesoedeling te voorkom. Kry mediese hulp indien nodig.
Oogkontak: Spoel besmette oë vir 15 minute of langer met skoon water uit. Lig af en toe die boonste en onderste ooglid. Indien die irritasie voortduur, kry onmiddellik mediese hulp.
Inaseming: Beweeg pasiënt weg van bron van vergiftiging na ‘n goed geventileerde area en maak klere rondom die nek los. Dien kunsmatige asemhaling en suurstof toe indien nodig. Hou pasiënt warm en kalm. **Kry onmiddellik mediese hulp.**
Ingeneem: Indien ingesluk, moet braking geïnduseer word deur die agterste gedeelte van die keel met u vinger te prikkel. Herhaal totdat braaksel helder is en nie meer na gif ruik nie. Kry onmiddellik mediese hulp. Die toediening van suurstof en uitvoering van ‘n maagspoeling mag slegs deur gekwalifiseerde mediese personeel gedoen word. Moet nie direkte mond-tot-mond-asemhaling toepas nie.

NOTA AAN GENEESHEER
Behandel simptomaties en ondersteunend. Hou pasiënt onder toesig en monitor bloeddruk en polsslag gedurig (hartvesaking en hipotonia kan voorkom). Voorsien ondersteunende maatreëls vir asemhaling en kardiale werking. Dien kunsmatige asemhaling toe indien verlamming voorkom. Addisionele maatreëls behels die uitskakeling van die gifstof in ligaam of versnelde uitskeiding (maagspoeling, sout lakseermiddel). Indien produk ingeasem word tydens braking, kan chemiese longontsteking ontstaan. Indien braking plaasvind, verseker dat braaksels nie ingeasem word nie.

WEERSTANDSWAARSKUWING
Vir weerstandsbestuur, is **TOPSTAR** ‘n groepkode 4A insekdoder. Enige populasie van ‘n spesifieke insek mag individue insluit wat ‘n natuurlike weerstand teen **TOPSTAR**, of enige ander groepkode 4A insekdoder het. Indien hierdie insekdoders herhaaldelik gebruik word, kan die weerstandsbiedende individue uiteindelik die insekpopulasie oorheers. Hierdie weerstandbiedende insekte sal waarskynlik nie deur **TOPSTAR** of enige groepkode 4A insekdoder beheer word nie.

GEBRUIKSBEPERKINGS

- Moet nie op enige gewas of situasie aanwend wat nie in die voorskrifetiket verskyn nie.
- Moet nie hierdie produk in kombinasie of tenkmengsel met enige ander produk of landboumiddel gebruik wat nie spesifiek op hierdie etiket gelys is nie. Meridian Agrochemical Company (Edms.) Bpk. aanvaar geen verantwoordelikheid vir enige negatiewe gevolge indien die instruksies op die etiket nie nagekom word nie, tensy ‘n Meridian verteenwoordiger vooraf geraadpleeg is.
- Moet nie gedurende die hitte van die dag of indien reën verwag word, toedien nie.
- Alle toedienings moet met geskikte spuittoerusting gedoen word wat in ‘n goeie werkende toestand is en korrek gekalibreer is om te verseker dat die verlangde bedekking op die teikenarea verkry word.
- Verseker deeglike penetrasie en druppelbedekking.

Om weerstand teen insekdoders te vertraag:

- Vermy die eksklusiewe herhaaldelike gebruik van insekdoders met dieselfde groepkode.

Wissel af met, of maak tenkmengsels van, produkte van verskillende insekdodergroepkodes. Moet nie **TOPSTAR** of enige ander groep 4A produk meer as een keer per seisoen op sitrus spuit nie.

- Integreer ander beheermaatreëls (chemies, biologies, verbouing) in insekbeheerprogramme.
- Dien **TOPSTAR** slegs een keer per seisoen op sitrus toe.

Aangesien die voorkoms van weerstand nie voorspel kan word nie, word gebruikers aangeraai om behandelde gewasse noukeurig dop te hou. Indien die behandeling met **TOPSTAR** soos aanbeveel nie doeltreffend was nie, mag ‘n weerstandbiedende populasie teenwoordig wees. Indien ‘n weerstandbiedende populasie positief geïdentifiseer word, moet daar onmiddellik oorweging geskenk word aan die gebruik van ‘n insekdoder met ‘n ander metode van werking, waarvan daar geen rekord van weerstand teen die betrokke plaag is. Vir spesifieke inligting oor weerstandsbestuur kontak die registrasiehouer van hierdie produk.

METODE VAN WERKING

Tiaklopried tree op as ‘n agonis van die nikotien-asetielcholienreseptor in die sentrale senuwee sisteem wat gevolglik die sinaptiese seintransmissies versteur. Tiaklopried is ‘n akute kontak- en maaggif met sistemiese eienskappe.

NOODREGISTRASIE

Die volgende was as noodregistrasies toegestaan: Die beheer van Blaaspootjies *(Frankliniella occidentalis*) op Bessies en ander klein vrugte. Produkte wat vir noodregistrasies goedgekeur is, ondergaan nogsteeds evaluering vir doeltreffendheid, selektiwiteit en residue. Let asseblief daarop dat menslike- en omgewingsveiligheid alreeds goedgekeur is.

GEBRUIKAANWYSINGS
Gebruik slegs soos aangedui.

MENGINSTRUKSIES

Maak die spuittenk halfvol met skoon water. Skud die houer deeglik voor gebruik. Voeg die korrekte hoeveelheid **TOPSTAR** by terwyl aanhoudend geroer word. Maak die spuittenk vol tot by die verlangde volume water. **Die tenkmengsel moet onmiddellik uitgespuit word en nie toegelaat word om oornag in die spuittenk te staan nie.** Moet nie brakwater gebruik nie. Die spuittoerusting moet aan die einde van toediening deeglik uitgewas word.

VERENIGBAARHEID

Die verenigbaarheid van **TOPSTAR** met ander produkte hang van die formulerings van die betrokke produkte af, asook van die kwaliteit van die spuitwater wat gebruik word. Deurdat formulerings van tyd tot tyd kan verander, word dit aanbeveel om ‘n fisiese verenigbaarheidstoets uit te voer alvorens die tenkmengsel gemaak word. Moet nie tenkmengsels met ander landbouprodukte of blaarvoedingprodukte maak, alvorens seker gemaak is dat die effektiwiteit van die produk nie sal verlaag, of gewasskade sal voorkom nie. Wanneer **TOPSTAR** met ander produkte gemeng word, moet al die etiketvoorskrifte noukeurig nagekom word. **TOPSTAR** is verenigbaar met die meeste plaagdoders wat op appels en pere gebruik word.

TOEDIENINGSMETODES

Verseker dat die spuittoerusting korrek gekalibreer is en gereeld gedurende toediening nagegaan word om egalige en akkurate toediening te verseker. **Die mengsel moet aanhoudend en deeglik geroer word tydens toediening.** Slegs skoon water moet gebruik word.

Grondtoediening:

- **TOPSTAR** kan toegedien word met konvensionele hoë-druktoerusting met holkeelspuitpunte wat medium tot fyn druppels lewer. Kalibreer die apparaat voor toediening om seker te maak dat die korrekte dosis toegedien word. Verseker egalige verspreiding van die spuitstof reg oor die teikenarea.
- Spuitvolumes moet aangepas word volgens die boomryvolume. Gebruik ‘n gepasde spuitvolume om voldoende bedekking en benatting van die boom te verseker. Moniteer effektiwiteit binne 3 dae en herhaal toediening indien nodig.

AANBEVELINGS

GEWAS/PLAAG	DOSIS	OPMERKINGS
Appels en Pere Kodlingmot (*Cydia pomonella*)	15 mℓ/100 ℓ water	Dien toe as ‘n voldekbespuiting. Deeglike bedekking is belangrik. Begin toediening met die begin van ‘n mot-generasie of met ¾ blomblaarval (in die geval van die eerste generasie). Herhaal met 14 dae tussenposes vir ‘n maksimum van **vier** toedienings. Om die ontwikkeling van weerstand te voorkom of te vertraag, moet produkte met verkillende werkswyses toegedien word om die ander twee mot-generasies te beheer. Indien **TOPSTAR** gebruik word vir beheer van die laaste generasie van die seisoen, moet ‘n produk met ‘n ander metode van werking gebruik word vir beheer van die eerste generasie in die volgende seisoen.
Bessies (Bloubessies, Swartbessies, Bosbessie, Doubrame (insluitend boysenbessies en loganbessie) appelliefie, frambose, swartaalbessies en korinte) Blaaspootjies (Insluitend Westerse blomblaaspootjie: *Frankliniella occidentalis*)	30 mℓ/100 ℓ	Na verkenning, dien toe as ‘n ligte dekbespuiting met eerste tekens van infestering. Verseker deeglike en egalige bedekking. Dien die lae dosis toe indien die besmetting laag is. Herhaal indien nodig met ‘n maksimum van 2 toedienings met 14dae intervalle. Indien verdere toedienings vereis word, maak gebruik van geregistreerde insekdoders met ‘n verskillende metode van werking as **TOPSTAR.**
Sitrus (uitsluitend suurlemoene en kumkwat) Blaaspootjie (*Scirtothips aurantii*) Plantluise (*Toxoptera citricidus*)	30 mℓ + 250 mℓ medium olie / 100 ℓ water	Dien toe as ‘n **enkel** ligte dekbespuiting vanaf 100 % blomblaarval en **nie later as 3 weke na blomblaarval** nie, afhangende van infestasie druk, gebaseer op monitering. Deeglike bedekking van vrugte is noodsaaklik. Voorafgaande en opvolgende toedienings met ander geregistreerde produkte teen blaaspootjie, mag nodig wees afhangende van infeksiedruk, gebaseer op monitering. Dus vorm **TOPSTAR** deel van ‘n blaaspootjiebeheerspuitprogram. Plantluise wat aanwesig is met toediening sal ook beheer word.
Perskes en Nektariens Oosterse vrugtemot (*Cydia molesta*)	15mℓ / 100ℓ water	Dien een of meer van die volgende hoë volume bespuitings toe met ‘n maksimum van 3 bespuitings per seisoen. Dien behandelings toe tussen 278 en 333 grade-dae na elke biofiksering*. In die geval van ‘n baie hoë eerste generasie motvlug infestasie word twee bespuitings aanbeveel. Dien die eerste bespuiting toe op 200 grade-dae en die tweede 10-14 dae later. Monitor lokvalle elke 2 dae tot die biofiksering van die eerste generasie bepaal is en dan weekliks daarna. Soos elke daaropvolgende motvlug begin afneem, monitor lokvalle elke 2 dae tot die aanvang van die volgende motvlug om die biofiksering akkuraat te bepaal en daarna weer op weeklikse intervalle. Toediening van **TOPSTAR** vir die beheer van Oosterse vrugtemot (OVM) sal ook help met die beheer van Groen Perskeluis (*Myzus persicae*). Die **TOPSTAR** toedienings vorm deel van ‘n OVM-beheerprogram en verdere beheertoedienings moet met ander nie-verwante geregistreerde insekdoders gedoen word.

*Biofiksering is die term wat gebruik word om die begin van elke motgenerasie te beskryf. Dit is die datum waarop die eerste onderhoudende verskyning van motte van elke generasie in feromoonlokvalle waargeneem word. (Raadpleeg u adviseur indien onseker is oor die bepaling van die biofiksering.)

Uitwerking op voordelige insekte:

Sitrus:
Aphytis linganensis – skadeloos
Chilocorus nigritus – baie skadelik
Coccidoxenoides peregrinus – baie skadelik
Euseius citri – skadeloos
Trichogrammatoidea cryptphlebiae – effe skadelik
Heuningbye – skadeloos

Appels en pere:
Neoseiulus californicus – skadeloos
Oligota fageli – effe skadelik
Heuningbye – skadeloos