



PYRINEX[®] 250 CS

Reg. no. L6515 Act/Wet 36 of/van 1947
N-AR0500; W130713

A capsule suspension stomach and contact insecticide for the control of pests as indicated. 'n Kapsule suspensie maag- en kontakinsek-
doder vir die beheer van insekte soos aangedui.

IRAC INSECTICIDE GROUP CODE

1B

IRAC INSEKDODERGROEPKODE

ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL

chlorpyrifos (organophosphate) 250 g/l chlorpirifos (organofosfaat)

NET VOLUME/NETTO VOLUME

..... l

REGISTRATION HOLDER/REGISTRASIEHOUER

ADAMA South Africa (Pty.) Ltd.

Reg. no. 1992/001741/07

21 Viben Street

7560 Brackenfell

T: +27 21 982 1460 F: +27 21 982 5810

infocpt@adama.com

**PYRINEX[®] is the registered trademark of a company of the ADAMA GROUP.
PYRINEX[®] is die geregistreerde handelsmerk van 'n maatskappy van die ADAMA GROEP.**

CONTACT IN EMERGENCY/KONTAK IN NOOD

Griffon Poison Information Centre: +27 82 446 8946

Tygerberg Poison Information Centre: +27 21 931

Batch number

Date of manufacture

Lotnommer
Datum van vervaardiging

UN no: 3082



CAUTION
VERSIGTIG



WARNINGS

Withholding periods (minimum number of days between last application and harvest or feeding):

Apples	40 days
Bananas, grapes	28 days
Cabbage, Brussel sprouts, potatoes, cauliflower, broccoli	7 days
Carrots, lettuce	21 days
Citrus	60 days
Grain sorghum, dry beans, wheat, maize	32 days
Tree nuts (macadamia, pecan nuts, cashew nuts, almonds, hazel and pistachio nuts)	83 days
Pastures	14 days
Tobacco	50 days
Tomatoes	4 days
Wheat, maize (grazing)	35 days

Export crops: The local maximum residue levels (MRLs) will not be exceeded if **PYRINEX® 250 CS** is used according to the label instructions. However, ADAMA South Africa (Pty.) Ltd. cannot be held responsible if export MRLs are exceeded. Consult the local export bodies regarding application timing, withholding periods and specific tolerances of countries to which produce will be exported.

- Handle with care.
- Harmful if swallowed, inhaled or absorbed through the skin.
- Mildly irritating to skin and causes sensitization by skin contact.
- Toxic to fish, bees and wildlife.
- Store in a cool, dry place away from food and feedstuffs.
- Keep out of reach of children, uninformed persons and animals.
- **Re-entry:** Do not enter treated area until spray deposit has dried unless wearing protective clothing.
- **Aerial application:** Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings. Do not spray over or allow spray drift to contaminate water or adjacent areas.

Although this remedy has been extensively tested under a large variety of conditions the registration holder does not warrant that it will be efficacious under all conditions because the action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the pest to 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 or animal, or for lack of performance of the remedy concerned due to failure of the user to follow the label instructions, or to the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

PRECAUTIONS

- Do not inhale the spray mist.
- Wear rubber gloves and face shield when handling the concentrate.
- Wash contaminated clothing after use.
- Wash with soap and water after use or accidental skin contact.
- In case of eye contact rinse with running for 15 minutes.
- Do not eat, drink or smoke whilst mixing or applying the product or before washing hands and face.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean applicator before using it for other remedies. Dispose of wash water where it will not contaminate crops, grazing, rivers, dams etc.
- Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to a minimum of 10 % of that of the container. Add the rinsings to the contents of the spray tank before destroying the container in the prescribed manner.
- Destroy empty container by perforation and flattening and never use for any other purpose.
- Prevent contamination of food, feedstuffs, drinking water and eating utensils.

RESISTANCE WARNING

For resistance management **PYRINEX® 250 CS** is a group code 1B insecticide. Any insect population may contain individuals naturally resistant to **PYRINEX® 250 CS** and other group code 1B insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **PYRINEX® 250 CS** and other group code 1B insecticides.

To delay insect resistance the following can be done:

- Avoid exclusive repeated use of insecticides from the same insecticide group code. Alternate or tank mix with products from different insecticide group codes.
- Integrate the control methods (chemical, cultural, biological) into pest control programmes.
- For specific information on resistance management contact the registration holder of this product.

DIRECTIONS FOR USE

Use only as indicated.

Mixing instructions

Shake the container well before use and close the container tightly after use. Fill the spray tank half with clean water and add the required volume of **PYRINEX® 250 CS** to the spray tank while agitating. Fill the spray tank with water while maintaining agitation.

APPLICATION

Ground application

PYRINEX® 250 CS can be applied by means of any suitable medium to high volume applicator provided it is equipped with an efficient agitator, it is able to distribute the spray evenly over the target area and it is calibrated correctly.

Aerial application

Aerial application of **PYRINEX® 250 CS** may only be done by a registered Aerial Application Operator using a correctly calibrated, registered aircraft according to the instructions of SANS Code 10118 (The aerial application of pesticides). Ensure that the spray mixture is distributed evenly over the target area and that the loss of spray material during application is restricted to a minimum. It is therefore essential that the following criteria be met:

- Volume: A spray mixture volume of 30 L/ha is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy, or be held responsible for any adverse effects if this product is applied aurally at a lower volume rate than recommended above.
- Droplet coverage: 30–40 droplets/cm² must be recovered at the target area.
- Droplet size: A droplet spectrum with a VMD of 250–280 microns is recommended. Limit the production of fine droplets less than 150 microns (high drift and evaporation potential) to a minimum.
- Flying height: Maintain the height of the spray boom at 3–4 metres above the target. Do not spray when aircraft dives, is in a climb or when banking
- Use suitable atomising equipment that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product. The spraying system must produce a droplet spectrum with the lowest possible Relative Span.
- Position all the atomisers within the inner 60–75 % of the wingspan to prevent droplets from entering the wingtip vortices.
- The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8 °C.
- Stop spraying if the wind speed exceeds 15 km/h.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- Spraying under temperature inversion conditions (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80 % and above) may lead to the following:
 - a) Reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage).
 - b) Damage to other sensitive crops and/or non-target areas through drifting of the suspended spray cloud away from the target field.
- Ensure that the Aerial Spray Operator knows exactly which fields to spray.
- Obtain an assurance from the Aerial Spray Operator that the above requirements will be met and that relevant data will be compiled in a logbook and kept for future reference.

APPLICATION RATES

CROP AND TARGET	DOSAGE/100 L WATER OR AS INDICATED	REMARKS
<p>Apples Woolly aphid (<i>Eriosoma lanigerum</i>)</p>	150 ml	<p>Pre-harvest woolly aphid control (summer spray only): Apply as a full cover spray when the pest starts moving upwards into the trees or when first noticed. If colonization is observed after initial application, apply a second spray not later than 40 days before harvest. The required spray volume per hectare for a specific growth stage should be accurately calculated according to the Unrath method (Deciduous Fruit Growers, November 1986.) The spray applied to control woolly aphid will also control codling moth for a period of 14 days and suppress pernicious scale and mealy bug. Do not exceed the recommended dosage rate on Golden Delicious as ring-marking of fruit may occur under certain growing conditions.</p> <p>Post-harvest woolly aphid control: If necessary apply PYRINEX® 250 CS spray as soon as possible after harvest.</p>
<p>Apples, pears, peaches, plums and apricots Pernicious scale (<i>Quadraspidiotus perniciosus</i>) Red scale (<i>Aonidiella aurantii</i>)</p>	150 ml	Apply only when the trees are dormant. Apply at least two high volume sprays at 4 week intervals, one before and one after pruning.
<p>Apples and pears Mealy bug (<i>Pseudococcus calceolariae</i>, <i>P. obscurus</i>)</p>	150–200 ml (3.25–4.8 L/ha)	Dormant applications only: Apply two high volume sprays. Apply the first spray with delayed foliation oil spray or 3 weeks before bud swell/green tip and the second spray at bud swell/green tip. Use the higher dosage rate where heavy fruit infestation was experienced the previous season.
<p>Bananas Flat mite (<i>Brevipalpus californicus</i>) Thrips (<i>Hercinothrips bicinctus</i>)</p>	150 ml	Apply as a high volume spray and ensure good coverage of each bunch. Commence spraying at the end of July and repeat every 4 weeks until February.

CROP AND TARGET	DOSAGE/100 L WATER OR AS INDICATED	REMARKS
<p>Carrots, potatoes Cutworm (<i>Agrotis</i> spp.) Western Cape only</p>	1.9 L/ha	Apply as an overall application when plants emerge. Repeat application at intervals of 2–3 weeks. Apply in at least 500 L water/ha.
<p>Citrus Red scale (<i>Aonidiella aurantii</i>) Mussel scale (<i>Cornuaspis beckii</i>) Circular purple scale (<i>Chrysomphalus aonidum</i>) African bollworm (<i>Helicoverpa armigera</i>) Aphids (<i>Toxoptera</i> spp.) Mealy bug (<i>Planococcus citri</i>, <i>Nipaecoccus vastator</i>, <i>Paracoccus burnerae</i>) Orange dog (<i>Papilio</i> spp.)</p>	<p>200 ml 75 ml + 1 L narrow distillation range spray oil 150 ml 40 ml 200 ml or 115 ml + 500 ml narrow distillation range spray oil 75 ml</p>	<p>Preventive treatment: Usage in orchards where red scale is under commercial control.</p> <p>1. Apply as a full cover spray at 80–100 % petal fall.</p> <p>2. In hot, low lying areas with special reference to young trees or in other areas where a second spray is considered necessary, re-apply 5–8 weeks after the spring spray.</p> <p>When a single preventive spray is required, apply 9–11 weeks after petal fall. In the case of double spray preventive programmes, precede this treatment with 200 ml PYRINEX® 250 CS per 100 L water in spring.</p> <p>Warning: Do not apply if shade temperature exceeds 33 °C. Do not apply 35 days before or after sulphur applications.</p> <p>Important: In all cases apply treatments as a full cover spray. In all cases keep treated trees under observation and be prepared to apply a full corrective spray with a registered pesticide if scale infestation of fruit occurs in mid to late summer.</p> <p>Warning: Poor control can be expected if organophosphate resistance has occurred.</p> <p>Apply as a full cover spray at blossom or when pest is noticed. Repeat if necessary.</p> <p>Apply as a light cover spray. Repeat if necessary.</p> <p>Apply when first signs of pests are noticed. Repeat application if necessary. Apply as a full cover spray and ensure thorough coverage.</p> <p>Apply as a light cover spray. Repeat if necessary.</p>

CROP AND TARGET	DOSAGE/100 L WATER OR AS INDICATED	REMARKS
Citrus (continued) Psylla (<i>Trioza erytrea</i>)	115 ml	Apply when eggs start to hatch on new growth. If possible apply on a spot spray basis. If swelling has already occurred on leaf surfaces, spraying will not correct abnormal growth.
Cruciferae Aphids (<i>Brevicoryne brassicae</i>) Caterpillars of the diamond-back moth (<i>Plutella xylostella</i>) Greater cabbage moth (<i>Crociodolomia binotalis</i>)	100 ml	Apply when pest is first noticed. Do not apply in less than 500 L spray mixture/ha. Ensure thorough coverage of the whole plant. When aphids or the caterpillars are already in the cabbage head or in the clusters of leaves of the Brussel sprouts, variable control can be expected. The adding of a wetting agent is recommended. Repeat application when necessary.
Dry beans, grain sorghum Black maize beetle (<i>Heteronychus arator</i>)	20 ml/100 m row length in 3 L water	Spray into the plant furrow just behind the planter shoe before closing the furrow.
Forestry (transplanted Eucalyptus seedlings) White grub	0.75-1.0 ml/1 L water per planting station	Apply 500 ml of the mixture to the planting hole just before the seedling is transplanted. Fill the hole with soil and apply the other 500 ml as a soil drench around the seedling. Apply the higher dosage rate where high infestations are expected.
Lettuce Cutworm (<i>Agrotis</i> spp.) Western Cape only	1.9 L/ha	Apply as an overall application when plants emerge. Repeat application every 7–14 days when necessary. Apply in at least 500 L water/ha.
Tree nuts (macadamia, pecan nut, cashew nut, almond, hazel nut and pistachio nut) Thrips (<i>Scirtothrips aurantii</i>) Cotton aphid (<i>Aphis gossypii</i>) Stinkbugs (various spp.)	200 ml/100 L water	Apply as a full cover spray when nuts have reached marble size and as soon as the pest is noticed. Repeat the application 4 weeks later. Apply a third application 4 weeks after the second application if required.

CROP AND TARGET	DOSAGE/100 L WATER OR AS INDICATED	REMARKS
<p>Maize Black maize beetle (<i>Heteronychus arator</i>)</p>	<p>Row application 20 ml/100 m row length in 3 L water</p> <p>Overall application 1.9 L/ha in 200 L water</p>	<p>Apply in a 30 cm band behind the planter press-wheel and cover with a layer of soil by dragging a piece of iron or a chain behind the planter.</p> <p>Apply as an overall spray prior to planting and mixing the soil to a depth of 10 cm by using a suitable implement, e.g. a disc or Field span.</p> <p>NB: These applications will suppress cutworm. Less effective control can be expected under dry soil conditions. May be sprayed onto the soil surface without incorporation, if rain is expected within 24 hours of application or before irrigation.</p>
<p>Stalkborer (<i>Busceola fusca</i>)</p>	<p>7.0 ml/100 m row length in 3 L water</p>	<p>GROUND APPLICATION ONLY</p> <p>Early planting: Apply when 5 % of the plants are infested with eggs or when 10 % plants show “shot hole” damage. If control of this infestation is delayed too long, the larvae may be protected inside the stalk and poor results can be expected.</p> <p>Late planting: Apply the first spray 30–35 days after planting and repeat 14 days later.</p>
<p>Pastures Army worm (<i>Spodoptera exempta</i>)</p>	<p>480 ml/ha</p>	<p>Apply in 200–500 L water/ha.</p>
<p>Potatoes Black maize beetle (<i>Heteronychus arator</i>)</p> <p>Cutworm (<i>Agrotis</i> spp.)</p>	<p>Pre-plant: 30 ml/100 m row length in 3 L water</p> <p>Post-plant: 950 ml/ha</p> <p>1.9 L/ha</p>	<p>Programme application: Apply in a 10 cm band just before closing the furrows.</p> <p>Apply 6 weeks later in not less than 500 L water/ha and increase the volume of water with the increase in crop density. Repeat at intervals of 2–3 weeks. Use drop arms and ensure good ground coverage. Rain or ridging after application is essential for good control.</p> <p>Apply just prior to tuber initiation in not less than 500 L water/ha and increase the volume of water with the increase in crop density. Repeat at 2–3 week intervals. Use drop arms and ensure good ground coverage. Rain or ridging after application is essential for good control.</p>

CROP AND TARGET	DOSAGE/100 L WATER OR AS INDICATED	REMARKS
Tobacco Cutworm (<i>Agrotis</i> spp.) Wireworm (<i>Elateridae</i> spp.)	380 ml	Apply 30 ml per plant as a stem treatment and ensure thorough wetting of the stem and soil surrounding the base of the plant. Do not apply to the heart of the plant as this can cause leaf damage. Repeat if necessary.
Tomatoes African bollworm (<i>Helicoverpa armigera</i>) Semi-looper (<i>Chrysodeixis acuta</i>) Thrips (<i>Thrips tabaci</i>)	300–380 ml 300–380 ml	Apply as a full cover spray and repeat every 7 days. When a heavy infestation of African bollworm occurs, the higher dose is recommended. Repeat this application every 7 days until pests are under control. Thereafter continue spraying the lower dosage rate (300 ml) every 7 days. Apply as a full cover spray and repeat every 7 days. The above spray programme for African bollworm and semi-looper will also control thrips.
Wheat Russian wheat aphid (<i>Diuraphis noxia</i>) Green and brown aphids (<i>Schizaphis graminum</i> , <i>Sitabion avenae</i> , <i>Rhopalosiphum padi</i>)	1.5–1.9 L/ha 1.5 L/ha	Use the higher dosage rate for the first application and where a high infestation occurs. Start spraying when first signs of an infestation are observed. Repeat spray 8-10 days later if necessary. . These applications will also suppress black maize beetle. Ground application: Apply as an overall spray in 200-300 L water/ha depending on size of the plants. Aerial spraying: Apply in not less than 30 L water/ha. Note: These applications will also suppress black maize beetle. Spray if the aphid population is on the increase and very few ladybird predators and parasites are present. Ground or aerial application.
Wine grapes Mealy bug (<i>Planococcus ficus</i>) Argentine ants (<i>Linepithema humile</i>) Suppression	150 ml	Summer spray only: Apply when the first movement of mealy bug is noticed. Apply as a high volume application ensuring thorough coverage of the vines. Repeat after 21 days if necessary. Do not apply during bud swell or within 4 weeks after budding.

CROP AND TARGET	DOSAGE/100 L WATER OR AS INDICATED	REMARKS
Mealy bug (<i>Planococcus ficus</i>)	200 ml 380 ml	<p>Dormant sprays only</p> <p>For low infestation pressure.</p> <p>For high infestation pressure.</p> <p>Apply two applications at two week intervals before budburst. Apply as high volume applications to ensure optimum coverage.</p> <p>Note: Argentine ants, if present at the time of application, will be suppressed by all three dosage regimes. Cocktail ants will be controlled by the higher dose and suppressed by the middle dose (200 ml).</p>
<p>Wine and table grapes</p> <p>Cocktail ants (<i>Crematogaster</i> spp.)</p> <p>Corrective sprays only</p>	770 ml	<p>Refer to paragraph above.</p> <p>Dormant spray only: Apply as a single spray when cocktail ants are present. Apply as a high volume application to ensure optimal coverage.</p> <p>Note: This application will also control mealy bug and suppress Argentine ants if present at application.</p>
<p>Table grapes</p> <p>Mealy bug (<i>Planococcus ficus</i>)</p>	380 ml (two applications)	<p>Dormant spray only: Apply 2 sprays in the late winter dormant period. The first spray should commence approximately 6 weeks before budburst. The second spray should be applied a minimum of 7 days after the first spray, but before any signs of green growth are evident. Use only hand gun type high volume sprays. Vines should be individually drenched down to ground level with a minimum of 4 L spray mixture/vine.</p> <p>Follow-up sprays: In certain vineyards high population pressure and poor application might necessitate follow-up sprays in summer. As soon as mealy bug is observed, apply a suitable registered chemical.</p>

WAARKUWINGS

Onthoudingsperiodes (minimum aantal dae tussen laaste toediening en oes):

Appels	40 dae
Piesangs, druive	28 dae
Kopkool, Brusselse spruite, aartappels, blomkool, broccoli	7 dae
Geelwortels, blaarslaai	21 dae
Sitrus	60 dae
Graansorghum, droëbone, koring, mielies	32 dae
Boomneute (makadama, pekanneute, kasjoeneute, amandels, haselneute, pistasieneute)	83 dae
Weiding	14 dae
Tabak	50 dae
Tamaties	4 dae
Koring, mielies (weiding)	35 dae

Uitvoergewasse: Die plaaslike maksimum residuvlakke (MRV's) sal nie oorskry word nie indien **PYRINEX® 250 CS** volgens etiketaanbevelings gebruik word. ADAMA South Africa (Pty.) Ltd. kan egter nie verantwoordelik gehou word nie indien uitvoer MRV's oorskry sou word. Skakel met die plaaslike uitvoerorganisasies rakende tyd van toediening, onthoudingsperiodes en spesifieke toleransievereistes van lande waarheen produkte uitgevoer gaan word.

- Hanteer versigtig.
- Skadelik indien ingesluk, ingeasem of deur die vel geabsorbeer word.
- Matig irriterend vir die vel en veroorsaak sensitisering deur velkontak.
- Giftig vir visse, bye en wild.
- Berg in 'n koel, droë plek weg van voedsel en voer.
- Hou buite bereik van kinders, oningeligte persone en diere.
- **Herbetreding:** Moet nie die behandelde gebied betree voordat die spuitstof droog is nie tensy beskermende oorklere gedra word.
- **Lugtoediening:** Stel al die inwoners in die onmiddellike omgewing van die gebied wat bespuit gaan word in kennis en reik die nodige waarskuwings uit. Moet nie oor aangrensende gebiede of water spuit of toelaat dat die spuitnewel wegdryf en dit besoedel nie.

Alhoewel hierdie middel omvattend onder 'n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie aangesien die werking en effek daarvan beïnvloed kan word deur faktore soos abnormale grond-, klimaats- en bergingstoestande; kwaliteit van verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui is 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 verantwoordelikeheid vir skade aan gewasse, die omgewing of vir nadelige effek op mens of dier of vir 'n gebrek aan prestasie van die betrokke middel as gevolg van die versuim van die gebruiker om etiketaanwysings na te kom of as gevolg van die ontstaan van toestande wat nie kragtens die registrasie voorsien kon word nie. Raadpleeg die verskaffer in die geval van enige onsekerheid.

VOORSORGMATREËLS

- Moet nie sproei newel in asem nie.
- Dra rubberhandskoene en gesigskerm wanneer die konsentraat hanteer word.
- Was besoedelde klere na gebruik.
- Was met seep en water na gebruik of indien dit per ongeluk met die vel in aanraking kom.
- In geval van oogkontak spoel onmiddellik uit met lopende water vir 15 minute.
- Moet nie eet, drink of rook terwyl vermeng of toegedien word of voor hande en gesig gewas is nie.
- Vermoedlik van spuitnewel na ander gewasse, weiding, riviere of damme wat nie behandel word nie.
- Maak toediener deeglik skoon na gebruik en gooi waswater waar dit nie gewasse, weiding, riviere of damme sal besoedel nie.
- Keer die leë houer om oor die spuit- of mengtenk en dreineer vir minstens 30 sekondes nadat die vloei tot 'n gedrup verminder het. Spoel die houer daarna driekeer uit met 'n volume water gelykstaande aan 'n minimum van 10 % van die inhoud van die houer. Gooi die spoelwater by die inhoud van die spuittenk voordat die houer vernietig word.
- Vernietig leë houer deur gate in te slaan en plat te slaan en moet dit nie vir enige ander doel gebruik nie.
- Vermoedlik van voedsel, voer, drinkwater en eetgerei.

WEERSTANDSWAARSKUWING

Vir weerstandsbestuur is **PYRINEX® 250 CS** as 'n IRAC groepkode 1B insekdoder geklassifiseer. Enige insekbevolking mag individue bevat wat 'n natuurlike weerstand teen **PYRINEX® 250 CS** en ander groepkode 1B insekdoders het. Die weerstandbiedende individue kan uiteindelik die insekbevolking oorheers as hierdie insekdoders herhaaldelik gebruik word. Hierdie weerstandbiedende insekte mag dalk nie deur **PYRINEX® 250 CS** of ander groepkode 1B insekdoders beheer word nie.

Om weerstand te vertraag:

- Vermoedlik die uitsluitlike herhaalde gebruik van insekdoders van dieselfde insekdodergroepkode. Wissel af, of gebruik in tenkmengsels met middels van ander groepkodes.
- Integreer beheermetodes (chemiese, bewerkings, biologies) in insekbeheerprogramme.
- Vir meer spesifieke inligting rakende weerstandsbestuur, skakel die registrasiehouer van hierdie produk.

GEBRUIKSAANWYSINGS

Gebruik slegs soos aangedui.

Menginstruksies

Skud die houer deeglik voor gebruik en maak deeglik toe na gebruik. Maak die spuittenk halfvol met skoon water en voeg die benodigde hoeveelheid **PYRINEX® 250 CS** in die tenk by terwyl geroer word. Vul nou die spuittenk met water terwyl voortdurend geroer word.

TOEDIENING

Grondtoediening

PYRINEX® 250 CS kan met enige geskikte medium of hoë volume spuitapparaat toegedien word mits dit korrek gekalibreer is, oor 'n doeltreffende roermeganisme beskik en in staat is om die spuitmengsel eweredig oor die teikenoppervlak te versprei.

Lugtoediening

PYRINEX® 250 CS kan slegs deur 'n geregistreerde Lugbespuitingsoperateur met 'n korrek gekalibreerde, geregistreerde vliegtuig volgens die instruksies van SANS 10118 (The aerial application of pesticides) uit die lug bespuit word. Verseker dat die spuitmengsel eweredig oor die teikenarea versprei word, en die verlies aan spuitmengsel tydens toediening tot 'n minimum beperk word. Dit is daarom belangrik om aan die volgende vereistes te voldoen:

- Volume: 'n Spuitmengsel volume van 30 L/ha word aanbeveel. Hierdie produk is nie teen 'n verlaagde volume getoets nie. Die registrasiehouer kan nie effektiwiteit waarborg, of verantwoordelik gehou word vir enige nadelige effekte indien hierdie produk teen 'n laer volume, as hierbo aanbeveel, toegedien word nie.
- Druppelbedekking: 30–40 druppels/cm² moet op die teikenarea herwin word.
- Druppelgrootte: 'n Druppelspektrum met 'n VMD van 250–280 mikrons word aanbeveel. Beperk die produksie van druppels kleiner as 150 mikrons (hoë drywing en verdampingspotensiaal) tot 'n minimum.
- Vlieghoogte: Handhaaf die hoogte van die spuitbalk bo die teiken op 3–4 meter. Moet nie spuit wanneer die vliegtuig duik, uitklim of draai nie.
- Gebruik geskikte atomiseringsapparaat wat die vereiste druppelgrootte en bedekking sal produseer, maar die minste verlies van produk verseker. Die spuitstelsel moet 'n druppelspektrum met die kleinste moontlike Relatiewe Span produseer.
- Plaas al die atomiseerders in die binneste 60–75 % van die vlerkspan om te verhoed dat druppels binne-in die vlerkpuntvorteks beweeg.
- Die verskil in temperatuur tussen die nat- en droëboltermometer van 'n swaaihigrometer, moet nie 8 °C oorskry nie.
- Stop bespuiting indien die windspoed 15 km/uur oorskry.
- Stop bespuiting tydens turbulente, onstabiele en droë toestande gedurende die hitte van die dag.
- Bespuiting onder temperatuur inversie toestande (deur bo of binne die inversie laag te spuit) en/of hoë lugvog toestande (relatiewe humiditeit 80 % en meer) mag tot volgende probleme aanleiding gee:
 - a) verlaagde effektiwiteit aangesien die druppels as 'n wolk in die lug bly hang en moontlik verdamp (onvoldoende bedekking op teiken).
 - b) skade aan nie-teiken gewasse of sensitiewe areas as gevolg van wegdrywing van die spuitwolk na nie-teiken area.
- Verseker dat die Lugbespuitingsoperateur presies weet watter lande bespuit moet word.
- Dit is noodsaaklik om 'n versekering van die Lugbespuitingsoperateur te verkry dat aan al die bogenoemde vereistes voldoen sal word en dat data van belang in 'n logboek saamgevat is vir toekomstige verwysing.

TOEDIENINGSHOEVEELHEDE

GEWAS EN TEIKEN	DOSIS/100 L WATER OF SOOS AANGEDUI	OPMERKINGS
Aartappels en geelwortels Snywurm (<i>Agrotis</i> spp.) Slegs Wes-Kaap	1.9 L/ha	Dien as 'n algehele bespuiting toe wanneer die plante opkom. Herhaal toediening met tussenposes van 2–3 weke. Dien in ten minste 500 L water/ha toe.
Aartappels Swartmieliekewer (<i>Heteronychus arator</i>) Snywurm (<i>Agrotis</i> spp.)	Voor plant: 30 ml/100 m rylengte in 3 L water Na plant: 950 ml/ha 1.9 L/ha	<p>Programtoediening: Dien toe in 'n 10 cm strook net voordat plantvoor toegemaak word.</p> <p>Dien toe 6 weke later in nie minder nie as 500 L water/ha en vermeerder die volume water met die toename in gewasdigtheid. Herhaal met 2–3 weke tussenposes. Gebruik valarms en verseker sodoende 'n goeie grondbedekking. Reën of operd na toediening is noodsaaklik vir goeie beheer.</p> <p>Dien toe net voor knolvorming begin in nie minder nie as 500 L water/ha en vermeerder die volume water met die toename in gewasdigtheid. Herhaal met 2–3 weke tussenposes. Gebruik valarms en verseker sodoende 'n goeie grondbedekking. Reën of operd na toediening is noodsaaklik vir goeie beheer.</p>
Appels Appelbloedluis (<i>Eriosoma lanigerum</i>)	150 ml	<p>Voor-oesbeheer van bloedluis: (Slegs somerbespuitings): Dien as 'n volle dekbespuiting toe wanneer plaag opwaarts in die bome begin inbeweeg of sodra dit waargeneem word. Indien kolonisering na die aanvanklike bespuiting waargeneem word, dien 'n opvolgbespuiting toe nie later as 40 dae voor oes nie. Spuitvolumes benodig/ha vir 'n spesifieke groeistadium moet akkuraat volgens die boomryvolume metode van Urath (Sagtevrugteboer, November 1986) bepaal word. Bespuiting toegedien vir die beheer van bloedluis sal ook kodlingmot vir 14 dae beheer en verderflike dopluis en witluis sal onderdruk word. Moet nie die voorgeskrewe dosis oorskry op Golden Delicious appels nie want ringmerke mag moontlik op vrugte onder sekere groeitoestande voorkom.</p> <p>Na-oes beheer van bloedluis: Indien nodig, dien 'n PYRINEX® 250 CS bespuiting so gou as moontlik na oes toe.</p>

GEWAS EN TEIKEN	DOSIS/100 L WATER OF SOOS AANGEDUI	OPMERKINGS
Appels, pere, perskes, pruime en appelkose Verderflike dopluis (<i>Quadraspidiotus perniciosus</i>) Roidopluis (<i>Aonidiella aurantii</i>)	150 ml	Dien slegs gedurende rusperiode van bome toe. Ten minste twee hoë volume bespuitings met tussenposes van 4 weke, een voor en een na snoei, moet toegedien word.
Appels en pere Witluis (<i>Pseudococcus calceolariae</i> , <i>P. obscurus</i>)	150–200 ml (3.25–4.8 L/ha)	Slegs rustydperktoedienings: Dien twee hoë volume bespuitings toe. Dien die eerste bespuiting met die vertraagde-bot-olie-bespuiting toe of 3 weke voor ogieswel/groenpunt. Die tweede bespuiting word toegedien met ogieswel/groenpunt. Gebruik die hoër toedieningshoeveelheid waar swaar vrugbesmetting die vorige seisoen ondervind is.
Blaarslaai Snywurm (<i>Agrotis</i> spp.) Slegs Wes-Kaap	1.9 L/ha	Dien as 'n algehele bespuiting toe wanneer die plante opkom. Herhaal toediening elke 7–14 dae indien nodig. Dien in ten minste 500 L water/ha toe.
Bosbou (<i>Eucalyptus</i>-saailinge wat uitgeplant word) Witmismurm.	0.75–1.0 ml/1 L water per plantgat	Dien 500 ml van die mengsel in die plantgat direk voor uitplant toe. Vul die plantgat met grond en dien die ander 500 ml om die saailing toe sodat die grond deurdrenk is met die mengsel. Gebruik die hoër toedieningshoeveelheid waar hoë besmettings verwag word.
Graansorghum, droëbone Swartmieliekewer (<i>Heteronychus arator</i>)	20 ml/100 m rylengte in 3 L water	Spuit in die plantvoor direk agter die planterskoen voordat die voor toegemaak word.
Koolgewasse Plantluise (<i>Brevicoryne brassicae</i>) Ruspes van die ruitrugmot (<i>Plutella xylostella</i>) Groter koolmot (<i>Crociodolomia binotalis</i>)	100 ml	Dien toe wanneer die plae vir die eerte keer opgemerk word. Moet nie minder as 500 L spuitmengsel/ha toedien nie. Verseker deeglike benatting van die hele plant. Wanneer die plantluise of larwes alreeds binne in die koolkop of tussen die blare van die Brusselse spruite is, kan wisselvallige beheer verwag word. Die byvoeging van 'n benattingsmiddel word aanbeveel. Herhaal toediening wanneer nodig.

GEWAS EN TEIKEN	DOSIS/100 L WATER OF SOOS AANGEDUI	OPMERKINGS
<p>Koring Russiese koringluis (<i>Diuraphis noxia</i>)</p> <p>Groen- en bruinplantluis (<i>Schizaphis graminum</i>, <i>Sitabion avenae</i>, <i>Rhopalosiphum padi</i>)</p>	<p>1.5–1.9 L/ha</p> <p>1.5 L/ha</p>	<p>Gebruik die hoër dosis vir die eerste bespuiting en waar 'n besonder swaar besmetting voorkom. Begin toediening as eerste tekens van besmetting waargeneem word. Herhaal bespuiting 8-10 dae later indien nodig. Hierdie toedienings sal ook swartmieliekewer onderdruk.</p> <p>Grondtoediening: Afhangende van plantgrootte, dien toe in 200–300 L water/ha. Dien as 'n algehele bespuiting toe.</p> <p>Lugbespuiting: Dien toe in nie minder nie as 30 L water/ha.</p> <p>Begin toediening sodra die luisbevolking toeneem en min skilpadbesiepredatore of parasiete teenwoordig is. Grond- of lugtoediening.</p>
<p>Boomneute (makadamia, pekanneute, kasjoeneute, amandels, haselneute en pistasieneute)</p> <p>Blaaspootjies (<i>Scirtothrips aurantii</i>)</p> <p>Katoenplantluis (<i>Aphis gossypii</i>)</p> <p>Stinkbesies (verskeie spp.)</p>	<p>200 ml/100 L water</p>	<p>Dien toe as 'n volle dekbespuiting wanneer die neute die albastergrootte stadium bereik het. Herhaal die toediening 4 weke later. Indien nodig dien 'n derde toediening 4 weke na die tweede toediening toe.</p>
<p>Mielies Swartmieliekewer (<i>Heteronychus arator</i>)</p>	<p>Rytoediening: 20 ml/100 m rylengte in 3 L water</p> <p>Algehele toediening: 1.9 L/ha in 200 L water</p>	<p>Dien toe as 'n 30 cm baan agter die planterdrukwiël en bedek met grond deur van 'n sleepyster of ketting gebruik te maak.</p> <p>Dien toe as 'n algehele bespuiting voor planttyd en vermeng tot 'n diepte van 10 cm met die grond deur gebruik te maak van 'n geskikte implement, bv. skotteleg of "Fieldspan".</p> <p>LW: Hierdie toediening sal snywurm onderdruk. Minder effektiewe beheer kan verwag word onder droë grondtoestande. Mag ook sonder inwerking op die grondoppervlak gespuit word indien reën binne 24 uur na toediening verwag word of voor besproeiing.</p>

GEWAS EN TEIKEN	DOSIS/100 L WATER OF SOOS AANGEDUI	OPMERKINGS
<p>Mielies (vervolg) Stronkboorder (<i>Busceola fusca</i>)</p>	<p>7.0 ml/100 m rylengte in 3 L water</p>	<p>SLEGS GRONDTOEDIENING:</p> <p>Vroeë plantdatum: Dien toe sodra 5 % van die plante met eiers besmet is of wanneer 10 % van die plante “haelskootletsels” vertoon. Indien daar te lank gewag word sal die ruspes te diep indring en buite bereik van die insekdoder wees wat swak resultate tot gevolg sal hê.</p> <p>Laat plantdatum: Dien eerste bespuiting 30–35 dae na plant toe en herhaal 14 dae later.</p>
<p>Piesangs Blaaspootjies (<i>Hercinothrips bicinctus</i>) Platmyt (<i>Brevipalpus californicus</i>)</p>	<p>150 ml</p>	<p>Dien as 'n hoë volume dekbespuiting toe en verseker 'n goeie bedekking van elke tros. Dien die eerste bespuiting aan die einde van Julie toe en herhaal tot Februarie met tussenposes van 4 weke.</p>
<p>Sitrus Rooidopluis (<i>Aonidiella aurantii</i>), Mosseldopluis (<i>Cornuaspis beckii</i>)</p> <p>Rondepersdopluis (<i>Chrysomphalus aonidum</i>)</p>	<p>200 ml</p> <p>75 ml + 1 L smalbestekdistillasie spuitolie.</p>	<p>Voorkomende behandeling: Vir gebruik in boorde waar rooidopluis kommersieel onder beheer is.</p> <ol style="list-style-type: none"> 1. Dien as 'n volle dekbespuiting toe by 80–100 % blomblaarval. 2. In warm laagliggende gebiede waar jong bome voorkom of in gebiede waar 'n tweede bespuiting nodig geag word, herhaal toediening 5–8 weke na die lente toediening. <p>Waar 'n enkele voorkomende bespuiting verlang word, dien 9–11 weke na blomblaarval toe. In geval van 'n dubbel voorkomende bespuitingsprogram, moet behandeling voorafgegaan word met 200 ml PYRINEX® 250 CS per 100 L water in die lente.</p> <p>Waarskuwing: Moet nie toedien as die skadutemperatuur 33 °C oorskry nie. Moet nie binne 35 dae voor of na 'n swaeltoediening, toedien nie.</p> <p>Belangrik: Dien in alle gevalle as 'n volle dekbespuiting toe. Hou behandelde bome in alle gevalle onder observasie en wees voorbereid om 'n korrektiewe behandeling met 'n geregistreerde middel toe te dien indien dopluis infestasië op die vrugte gedurende middel tot laat somer voorkom.</p>

GEWAS EN TEIKEN	DOSIS/100 L WATER OF SOOS AANGEDUI	OPMERKINGS
Sitrus (vervolg) Afrika bolwurm (<i>Helicoverpa armigera</i>) Plantluise (<i>Toxoptera</i> spp.) Witluis (<i>Planococcus citri</i> , <i>Nipaecoccus vastator</i> , <i>Paracoccus burnerae</i>) Lemoenvlinderruspe (<i>Papilio</i> spp.) Sitrusbladvlooi (Silla) (<i>Trioza erytrea</i>)	150 ml 40 ml 200 ml of 115 ml + 500 ml smalbestekdistillasie spuitolie 75 ml 115 ml	<p>Waarskuwing: Swak beheer kan verwag word indien daar bestandheid teen organofosfate voorkom.</p> <p>Dien toe met blomtyd as 'n volle dekbespuiting wanneer plaag opgemerk word. Herhaal indien nodig.</p> <p>Dien as 'n ligte dekbespuiting toe. Herhaal indien nodig.</p> <p>Dien toe wanneer eerste tekens van die plaag opgemerk word. Herhaal toediening indien nodig. Dien as 'n volle dekbespuiting toe.</p> <p>Dien toe as 'n ligte dekbespuiting. Herhaal indien nodig.</p> <p>Dien toe sodra die eiers uitbroei op die nuwe groei. Indien moontlik, wend lokaal (kol-kol) aan. Indien uitstulplings alreeds op blare begin vorm, sal bespuiting nie meer abnormale groei kan verhoed nie.</p>
Tabak Snywurm (<i>Agrotis</i> spp.) Draadwurm (<i>Elateridae</i> spp.)	380 ml	<p>Dien 30 ml per plant toe as 'n stambehandeling en verseker deeglike benatting van die stam en grond aan die basis van die plant. Moet nie oor die kroon van die plant toedien nie aangesien blaarbrand mag voorkom. Herhaal indien nodig.</p>
Tamaties Afrika bolwurm (<i>Helicoverpa armigera</i>) Valslandmeter (<i>Chrysodeixis acuta</i>) Blaaspootjie (<i>Thrips tabaci</i>)	300–380 ml 300–380 ml	<p>Dien toe as 'n volle dekbespuiting en herhaal elke 7 dae. Wanneer 'n hoë infestasië van Afrika bolwurm voorkom, word die hoër dosis aanbeveel. Herhaal toediening elke 7 dae totdat plaag onder beheer is. Gaan daarna voort met bespuiting teen die laer toedieningshoeveelheid (300 ml) elke 7 dae.</p> <p>Dien toe as 'n volle dekbespuiting en herhaal elke 7 dae. Bogenoemde spuitprogram vir Afrika bolwurm en valslandmeter sal ook blaaspootjie beheer.</p>
Weidings Kommandowurm (<i>Spodoptera exempta</i>)	480 ml/ha	Dien toe in 200–500 L water/ha.

GEWAS EN TEIKEN	DOSIS/100 L WATER OF SOOS AANGEDUI	OPMERKINGS
<p>Wyndruiwe</p> <p>Witluis (<i>Planococcus ficus</i>)</p> <p>Argentynse mier onderdrukking (<i>Linepithema humile</i>)</p> <p>Witluis (<i>Planococcus ficus</i>)</p>	<p>150 ml</p> <p>200 ml</p> <p>380 ml</p>	<p>Slegs somerbespuiting:</p> <p>Dien as 'n hoë volume bespuiting toe ten einde optimum bedekking te verseker. Dien toe sodra witluisbeweging waargeneem word. Herhaal na 21 dae indien nodig. Moet nie tydens ogieswel en binne 4 weke na bot toedien nie.</p> <p>Slegs winterbespuiting:</p> <p>Vir lae infestasiedruk.</p> <p>Vir hoë infestasiedruk.</p> <p>Dien toe twee toedienings met twee weeklikse tussenposes voor bot. Dien as 'n hoë volume bespuiting toe om 'n deeglike bedekking te verseker. Let wel: Argentynse miere indien teenwoordig tydens bespuiting, sal deur al drie bogenoemde toedieningshoeveelhede onderdruk word. Wipstertmiere sal deur die hoogste dosis beheer word en deur die middelste dosis (200 ml) onderdruk word.</p>
<p>Wyn- en tafeldruiwe</p> <p>Wipstertmiere (<i>Crematogaster spp.</i>)</p> <p>Slegs korrektiewe bespuiting</p>	<p>770 ml</p>	<p>Verwys ook na die paragraaf hierbo:</p> <p>Slegs winterbespuiting: Dien as 'n enkele bespuiting toe wanneer wipstertmiere teenwoordig is. Dien as 'n hoëvolume bespuiting toe ten einde optimum bedekking te verseker.</p> <p>Let wel: Hierdie toediening sal ook witluis beheer en Argentynse miere onderdruk indien teenwoordig tydens bespuiting.</p>
<p>Tafeldruiwe</p> <p>Witluis (<i>Planococcus ficus</i>)</p>	<p>380 ml (twee bespuitings)</p>	<p>Slegs winterbespuiting: Dien 2 bespuitings toe tydens die laaste gedeelte van die rustyd. Die eerste behoort ongeveer 6 weke voor bot plaas te vind en die tweede ten minste 7 dae later, maar voordat enige groen op die stokke begin wys. Gebruik slegs handspuitstang hoë volume bespuitings. Die stokke behoort elkeen tot grondvlak benat te word met ten minste 4 L spuitoplossing per stok.</p> <p>Opvolgbespuitings: In sekere wingerde mag hoë infestasiedruk of swak toedieningspraktyke opvolgbespuitings in die somer vereis. Sodra witluis waargeneem word, behandel met 'n ander geregistreerde middel.</p>