



# TRIVOR®

Reg. no. L10879 Act/Wet 36 of/van 1947

A dispersible concentrate contact and stomach insecticide with insect growth-regulant activity for the control of pests in citrus and grapes, as indicated.

'n Dispergeerbare konsentraat insekdoder met kontak- en maagaksie en insek-groeireguleerderaktiwiteit vir die beheer van plae in sitrus en druie, soos aangedui.

**IRAC INSECTICIDE GROUP CODE**

**4A/7C**

**IRAC INSEKDODERGROEPKODE**

## ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL

acetamiprid (neonicotinoids) .....	186 g/L	..... asetamiprid (neonikotinoïede)
pyriproxyfen .....	124 g/L	..... piriproksifen

## NET VOLUME/NETTO VOLUME

..... L

## REGISTRATION HOLDER/REGISTRASIEHOUER

ADAMA South Africa (Pty) Ltd  
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**TRIVOR® is a registered trademark of a company of the ADAMA GROUP.**  
**TRIVOR® is 'n 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: +27 861 555 777

Batch number .....

Date of manufacture .....

Lotnommer  
Datum van vervaardiging

UN no.: 3082



## WARNINGS

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

<b>Citrus</b> .....	84 days
<b>Grapes</b> .....	42 days

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

- Handle with care.
- Harmful if swallowed.
- Very toxic to aquatic life with long lasting effects.
- Toxic to birds.
- Moderately toxic to bees.
- Store in the closed, original container in a cool, well-ventilated area, away from direct sunlight, food, feed and other agricultural chemicals.
- Not flammable – but avoid contact with heat, flames and sparks and extremely high temperatures.
- Keep out of reach of children, uninformed persons and animals.
- In case of poisoning call a physician and show this label to him/her.
- **Re-entry interval:** Do not enter treated field until spray deposit has dried unless wearing protective clothing and gloves.

**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 because the action and effect thereof may be affected by factors such as abnormal climatic and storage conditions; quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the pest against the remedy concerned, as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment, or harm to humans or animals or for lack of performance of the remedy concerned due to failure of the user to follow the label instructions or to the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.**

## PRECAUTIONS

- Do not inhale spray or spray mist, fumes or vapours.
- Avoid contact with skin, eyes and clothes.
- Wear rubber gloves, face shield or goggles and protective clothing when handling and using the concentrate or the prepared product. In the event of eye contact, flush out at once. In the event of skin contact, wash off at once. If spilt on clothes, change and wash the clothes.
- Daily wash contaminated clothes and other protective equipment before reuse.

- Prevent contamination of food, feed, drinking water and eating utensils.
- Do not eat, drink, or smoke during handling and application of the product, or before washing.
- While applying the product, avoid contact with the spray as far as possible. Avoid spray drift onto other crops, grazing, rivers or dams.
- Clean applicator thoroughly after use and dispose of wash water where it will not contaminate crops, grazing, rivers or dams.
- 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 empty container *three times in succession* with one quarter on the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of *via* an approved collector or recycler ([www.croplife.co.za](http://www.croplife.co.za)).
- Do not bury or donate the container to any other parties that may use it as a container for food or beverages.

## SYMPTOMS OF HUMAN POISONING

None known.

## FIRST AID TREATMENT

**General:** In case of accident or unwellness, seek medical advice and show the safety data sheet or label to the medical advisor.

**Inhalation:** Move the person to fresh air, keep him/her warm and at rest. If breathing is irregular or has stopped, administer artificial respiration. Call the emergency contact centre or consult a physician for treatment advice.

**Ingestion:** Rinse mouth with water. Drink plenty of water, but do not administer anything by mouth to an unconscious person. Call the emergency contact centre or consult a physician for treatment advice.

**Skin contact:** Remove contaminated clothing and shoes, wash off with plenty of water and soap. Call the emergency contact centre or physician for treatment advice. Call the emergency contact centre or consult a physician for treatment advice.

**Eye contact:** Keep the eye open and rinse it slowly and gently with running water for 15 to 20 minutes. If present, remove contact lenses after the first 5 minutes; then continue rinsing the eye. Call the emergency contact centre or consult a physician for treatment advice.

## NOTE TO PHYSICIAN

Treat symptomatically.

## RESISTANCE WARNING

For the purpose of resistance management **TRIVOR**<sup>®</sup> is classified as a group code 4A and 7C insecticide. Any pest population may contain individuals naturally resistant to **TRIVOR**<sup>®</sup> and other group code 4A and 7C insecticides. The resistant individuals can eventually dominate the pest population if these insecticides are used repeatedly. These resistant pests may not be controlled by **TRIVOR**<sup>®</sup> or any other group code 4A and 7C insecticides.

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 the control methods (chemical, cultural, biological) into insect control programmes.

For more information regarding resistance management contact the registration holder of this product.

## **DIRECTIONS FOR USE**

**Use only as indicated.**

### **General**

**TRIVOR®** is a combination of two active substances with different modes of action, namely pyriproxyfen and acetamiprid.

Pyriproxyfen is an insect growth regulator (Group 7C) that suppresses embryogenesis (egg development) and inhibits metamorphosis and development into adult insects. Its effects are slow to appear, but irreversible. Pyriproxyfen acts primarily through ingestion by the target insect with some contact and ovicidal activity that allows for extended residual control. The activity of pyriproxyfen depends on the insect development stage.

Acetamiprid is a member of the neonicotinoid (Group 4A) insecticide family and interferes with neurotransmission in target insects, causing feeding to cease within hours or even minutes and achieves mortality within 24 to 48 hours. Acetamiprid is absorbed through contact and ingestion by the insect. Some translaminar movement within plant tissue could occur.

Due to the mode of action of **TRIVOR®**, evidence of activity may be slower to appear than in the case of conventional contact insecticides.

### **Use restrictions**

- Do not apply **TRIVOR®** by air.
- Do not apply **TRIVOR®** if rainfall that is likely to produce runoff is forecast within 48 hours of application.
- Do not apply **TRIVOR®** more than twice per growing season in citrus and more than once per growing season in grapes.
- Avoid application **TRIVOR®** while pollinators (bees) are actively foraging.
- Do not treat trees or plants that are under stress, for instance due to water logging, drought, soil compaction, nutrient deficiencies, root and stem diseases, or nematodes.

### **Compatibility**

The compatibility of **TRIVOR®** with other products can be influenced by the formulation of those products and the quality of the dilution water. As formulations of products can change without the knowledge of ADAMA South Africa (Pty) Ltd and the quality of water can differ from farm to farm, a physical compatibility test should always be carried out prior to application.

For more information regarding product compatibility contact ADAMA South Africa (Pty) Ltd.

### **Mixing instructions**

Shake the container prior to opening. Half fill the spray tank with clean water. Add the required quantity of **TRIVOR®** to the spray tank while agitating. Fill the spray tank with water to the required volume while agitating. Ensure constant effective agitation during mixing and application. Only prepare enough spray mixture for one day's use. Spray mixture should not be allowed to stand overnight.

## APPLICATION

**TRIVOR**<sup>®</sup> can be applied with a suitable, correctly calibrated air-assisted sprayer, equipped with an efficient agitation mechanism, and that will be able to distribute the spray mixture evenly over the target area.

## APPLICATION RATES

CROP AND TARGET	RATE	REMARKS
<b>Citrus</b> Mealy bug ( <i>Plannococcus citri</i> ) Thrips ( <i>Scirtothrips aurantii</i> ) Red scale ( <i>Aonidiella aurantii</i> )	40 ml/100 L	<p>Apply <b>TRIVOR</b><sup>®</sup> at 90 % petal drop, as a full cover spray to the point of runoff, ensuring thorough coverage of fruit and foliage throughout the crop canopy.</p> <p>Monitor for thrips from the start of flowering and apply when the action threshold is reached, typically before calyx closure. Do not apply to well-established populations dominated by mature adult insects. Continue monitoring for thrips, and if numbers are moderate to high apply a second application after a minimum spray interval of 14 days.</p> <p>Monitor for mealy bug and red scale crawlers and apply when first crawlers are noticed. Do not apply to well-established populations dominated by mature adult insects. Continue monitoring for crawlers, and if required apply a second application after a minimum spray interval of 14 days.</p> <p>To delay the development of resistance, apply <b>TRIVOR</b><sup>®</sup> as part of an integrated management strategy for the control of the pests indicated, followed by or alternating with insecticides with a different mode of action.</p>
<b>Grapes (grapevines)</b> Mealy bug ( <i>Planococcus ficus</i> )	50 ml/100 L	<p>Apply <b>TRIVOR</b><sup>®</sup> as a full cover spray to the point of runoff, ensuring thorough coverage of foliage throughout the crop canopy. Apply from 28 cm shoot length, but before the onset of flowering.</p> <p>Monitor for mealy bug crawlers and apply when first crawlers are noticed. Do not apply to well-established populations dominated by mature adult insects.</p> <p>To delay the development of resistance, apply <b>TRIVOR</b><sup>®</sup> as part of an integrated management strategy for the control of the pest, by using insecticides with a different mode of action for follow-up applications.</p>

## WAARSKUWINGS

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

<b>Druive</b> .....	42 dae
<b>Sitrus</b> .....	84 dae

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

- Hanteer versigtig.
- Skadelik indien ingesluk.
- Baie giftig vir waterlewe met 'n langdurige effek.
- Giftig vir voëls.
- Matig giftig vir bye.
- Stoor in die toe, oorspronklike houer in 'n koel, goed geventileerde area, weg van direkte sonlig, voedsel, voer, saad en ander landbouchemiese middels.
- Nie-vlambaar nie – maar vermy kontak met hitte, vlamme en vonke, en baie hoë temperature.
- Hou buite bereik van kinders, oningeligte persone en diere.
- In geval van vergiftiging moet 'n geneesheer gekontak word en hierdie etiket aan hom/haar getoon word.
- **Herbetredingsinterval:** Moet nie die behandelde gebied binnegaan voordat die spuitneerslag droog is nie, tensy beskermende klere en handskoene gedra word.

**Alhoewel hierdie middel omvattend onder 'n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie. Die werking en doeltreffendheid daarvan kan beïnvloed word deur faktore soos abnormale grond, klimaats- en bergingstoestande, kwaliteit van die verdunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui word nie en die voorkoms van weerstand van die plaag teen die betrokke middel asook die tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei en die omgewing of nadelige invloede op mense of diere of vir 'n gebrek aan prestasie van die betrokke middel as gevolg van 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 of dampe.
- Vermy kontak met vel, oë en klere.
- Dra rubberhandskoene, 'n gesigskerm of bril en beskermende klere wanneer konsentraat en aangemaakte produk hanteer word. In geval van oogkontak, spoel dadelik uit met water. Indien in kontak kom met die vel, was dit dadelik af. Indien gemors word op klere, trek die besoedelde klere dadelik uit en was dit.
- Was besoedelde klere en ander beskermende toerusting daagliks, voor dit weer gebruik word.

- Verhoed besoedeling van voedsel, voer, drinkwater en eetgerei.
- Moet nie eet, drink of rook gedurende vermenging of toediening of voordat hande en gesig gewas is nie.
- Tydens toediening, vermy sover as moontlik kontak met die spuit. Voorkom dat die spuitnewel wegdryf oor ander gewasse, weiding, riviere, damme of gebiede wat nie behandel word nie.
- Maak die toedieningsapparaat deeglik skoon na gebruik en gooi die spoelwater weg waar dit nie gewasse, riviere, weiding of damme sal besoedel nie.
- Keer die leë houer om oor die spuit- of mengtenk en laat dit vir minstens 30 sekondes dreineer nadat die vloeï tot 'n gedrup verminder het. Spoel daarna die leë houer *drie keer* na mekaar met een kwart van die houervolume vars water en giet die spoelwater in die spuittenk of mengtenk oor. Kap gate in die drie-keer gespoelde houer waarna dit aan 'n goedgekeurde versamelaar of verwerker oorhandig moet word ([www.croplife.co.za](http://www.croplife.co.za)).
- Moet nie die houer begrawe, verbrand of aan enige ander partye skenk wat dit as houer vir voedsel of drinkgoed mag gebruik nie.

## SIMPTOME VAN MENSLIKE VERGIFTIGING

Onbekend.

## NOODHULPBEHANDELING

**Algemeen:** In die geval van 'n ongeluk of ongesteldheid, kry mediese advies en wys die veiligheidsblad of etiket vir die mediese adviseur.

**Inaseming:** Neem die persoon na vars lug en hou hom/haar warm en rustig. Indien asemhaling onreëlmatig is of staak, pas kunsmatige asemhaling toe. Skakel die noodkontaksentrum of kontak 'n mediese praktisyn vir raad oor behandeling.

**Inname:** Spoel mond uit met water. Drink 'n groot hoeveelheid water, maar moenie enigiets per mond aan 'n bewustelose persoon toedien nie. Skakel die noodkontaksentrum of kontak 'n mediese praktisyn vir raad oor behandeling.

**Velkontak:** Verwyder besoedelde klere en skoene, was met 'n groot hoeveelheid koue water en seep. Skakel die noodkontaksentrum of kontak 'n mediese praktisyn vir raad oor behandeling.

**Oogkontak:** Hou die oog oop en spoel dit stadig en liggies met lopende water vir 15 tot 20 minute. Indien kontaklense gedra word, verwyder dit na die eerste 5 minute en gaan dan voort om te spoel. Skakel die noodkontaksentrum of kontak 'n mediese praktisyn vir raad oor behandeling.

## NOTA AAN GENEESHEER

Behandel simptome.

## WEERSTANDSWAARSKUWING

Vir die doel van weerstandsbestuur is **TRIVOR**<sup>®</sup> as 'n IRAC-groepkode 4A en 7C insekdoder geklassifiseer. Enige plaagbevolking mag individue bevat wat 'n natuurlike weerstand teen **TRIVOR**<sup>®</sup> en ander groepkode 4A en 7C insekdoders het. Die weerstandbiedende individue kan uiteindelik die insekbevolking oorheers as hierdie insekdoders herhaaldelik gebruik word. Hierdie weerstandbiedende plaë mag dalk nie deur **TRIVOR**<sup>®</sup> of enige ander groepkode 4A en 7C insekdoders beheer word nie.

Om insekdoderweerstand te vertraag:

- Vermoë die uitsluitlike herhaalde gebruik van insekdoders van dieselfde insekdodergroepkode. Wissel af, of gebruik in tenkmengsels met middels van ander groepkodes.

- Integreer beheermetodes (chemies, bewerking, biologies) in insekbeheerprogramme.

Vir meer spesifieke inligting rakende weerstandsbestuur, skakel die registrasiehouer van hierdie produk.

## **GEBRUIKSAANWYSINGS**

### **Gebruik slegs soos aangedui.**

**TRIVOR®** is 'n kombinasie van twee aktiewe bestanddele met verskillende metodes van werking, naamlik piriproksifen en asetamiprid.

Piriproksifen is 'n insekgroeireguleerder (Groep 7C) wat embriogenese (eierontwikkeling) onderdruk en metamorfose en die ontwikkeling tot volwasse insekte inhibeer. Die uitwerking is nie vinnig sigbaar nie, maar is onomkeerbaar. Piriproksifen werk hoofsaaklik deur inname deur die teikeninsek, maar dit het ook 'n mate van kontak- en eierdodende aksie wat verlengde residuele beheer tot gevolg het. Die aktiwiteit van piriproksifen hang af van die ontwikkelings stadium van die insek.

Asetamiprid is 'n lid van die neonikotinoïed-insekdoderfamilie (Groep 4A) en ontwig senuwee-oordraging, wat lei tot staking van voeding binne ure of selfs minute na inname en mortaliteit binne 24 tot 48 uur. Asetamiprid word geabsorbeer deur kontak en inname deur die insek. 'n Mate van translaminêre beweging kan in die plantweefsel plaasvind.

Weens die meganisme van werking van **TRIVOR®** kan tekens van aktiwiteit stadiger te voorskyn kom as in die geval van konvensionele kontakinsekdoders.

### **Gebruiksbeperkings**

- Moenie **TRIVOR®** deur die lug toedien nie.
- Moenie **TRIVOR®** toedien indien reënval wat waarskynlik tot afloop kan lei, voorspel word binne 48 uur na toediening nie.
- Moenie **TRIVOR®** meer as twee keer tydens die sitrusgroeiseisoen en meer as een keer tydens die wingerdgroeiseisoen toedien nie.
- Vermoed toediening van **TRIVOR®** terwyl bestuiwers (bye) aktief voed.
- Moenie bome of plante behandel wat onder stremming verkeer nie, byvoorbeeld vanweë versuip-toestande, droogte, grondkompaktering, voedingstekorte, wortel- en stamsiektes en aalwurms.

### **Verenigbaarheid**

Die verenigbaarheid van **TRIVOR®** met ander produkte kan beïnvloed word deur die formulering van daardie produk(te) en die kwaliteit van die verdunningswater. Aangesien die formulering van produkte kan verander sonder ADAMA South Africa (Pty) Ltd se medewete en die waterkwaliteit van plaas tot plaas kan verskil, is dit altyd raadsaam om eers 'n fisiese verenigbaarheidstoets te doen voordat bespuiting plaasvind.

Vir meer inligting rakende produkverenigbaarheid kontak ADAMA South Africa (Pty) Ltd.

### **Menginstruksies**

Skud die houer voor dit oop gemaak word. Maak die spuittenk halfvol met skoon water. Voeg die benodigde hoeveelheid **TRIVOR®** in die tenk terwyl geroer word. Vul daarna die spuittenk met water tot by die verlangde vlak terwyl voortdurend geroer word. Maak seker dat konstante en effektiewe roering plaasvind gedurende meng en toediening. Meng net genoeg spuitmengsel vir 'n dag se gebruik. Moet nie die spuitmengsel oornag laat staan nie.



## Toediening

**TRIVOR**<sup>®</sup> kan toegedien word met 'n geskikte, korrek gekalibreerde newelblaser, toegerus met 'n doeltreffende roermeganisme, en wat in staat is om die spuitmengsel eweredig oor die teikenoppervlak te versprei.

## TOEDIENINGSHOEVEELHEDE

GEWAS EN TEIKEN	DOSIS	OPMERKINGS
<b>Druive (wingerd)</b> Witluis ( <i>Planococcus ficus</i> )	50 ml/100 L	<p>Dien <b>TRIVOR</b><sup>®</sup> toe as 'n voldekbepuiting tot by die punt van afloop. Verseker deeglike bedekking van die blare dwarsdeur die blaredak. Dien toe vanaf 28 cm lootlengte, maar voor die aanvang van blom.</p> <p>Monitor vir witluiskruipers en dien toe wanneer die eerste kruipers opgemerk word. Moenie toedien op goed gevestigde populasies waarin volwasse insekte dominant is nie.</p> <p>Om die ontwikkeling van weerstand te vertraag, dien <b>TRIVOR</b><sup>®</sup> toe as deel van 'n geïntegreerde bestuurstrategie vir die beheer van die plaag, deur verdere toedienings te maak met insekdoders met 'n ander meganisme van werking.</p>
<b>Sitrus</b> Witluis ( <i>Planococcus citri</i> ) Blaaspootjie ( <i>Scirtothrips aurantii</i> ) Rooidopluis ( <i>Aonidiella aurantii</i> )	40 ml/100 L	<p>Dien <b>TRIVOR</b><sup>®</sup> toe by 90 % blomblaarval, as 'n voldekbepuiting tot by die punt van afloop, deur deeglike bedekking van die vrugte en blare dwarsdeur die boom te verseker.</p> <p>Monitor vir blaaspootjies van die begin van die blomstadium en dien toe wanneer die aksiedrumpelwaarde bereik word, tipies voor die kelkend toemaak. Moenie toedien op goed gevestigde populasies met dominant volwasse insekte nie. Gaan voort met die monitering van blaaspootjies. Wanneer die getalle gemiddeld tot hoog raak, maak 'n tweede toediening na 'n minimum spuitinterval van 14 dae.</p> <p>Monitor vir witluis- en rooidopluis-kruipers en dien toe sodra die eerste kruipers opgemerk word. Moenie toedien op goed gevestigde populasies met dominant volwasse insekte nie. Gaan voort met die monitering van die kruipers. Indien nodig, maak 'n tweede toediening na 'n minimum spuitinterval van 14 dae.</p> <p>Om die ontwikkeling van weerstand te vertraag, dien <b>TRIVOR</b><sup>®</sup> toe as deel van 'n geïntegreerde bestuurstrategie vir die beheer van die plaag, deur verdere toedienings te maak of af te wissel met insekdoders met 'n ander meganisme van werking.</p>