



# PLEMAX

Reg. no. L10246 Act/Wet 36 of/van 1947

A suspension concentrate insecticide with chitin-inhibiting, contact and stomach action for the control of pests as listed on apples, pears, maize and sweetcorn.

Suspensiekonsentraat-insekdoder met chitien-inhiberende, kontak- en maagaksie vir die beheer van plae soos gelys in appels, pere, mielies en soetmielies.

**IRAC INSECTICIDE GROUP CODE 22A & 15**

**IRAC INSEKDODER GROEPKODE**

## ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL

indoxacarb (oxadiazine) .....	240 g/L	..... indoxacarb (oksadiasien)
novaluron (benzoylphenyl urea) .....	80 g/L	..... novaluron (bensoïelfenielureum)

## NET VOLUME/NETTO VOLUME

..... L

## REGISTRATION HOLDER/REGISTRASIEHOUER

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**PLEMAX is a trademark of a company of the ADAMA GROUP.  
PLEMAX is 'n 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



**CAUTION  
VERSIGTIG**



## WARNINGS

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

<b>Apples, pears</b> .....	28 days
<b>Maize, sweetcorn</b> .....	63 days

- Handle with care.
- Poisonous by ingestion, contact and inhalation.
- May cause sensitization by skin contact.
- Toxic to fish and other aquatic organisms.
- Store in a cool, dry and well ventilated place away from food, feedstuffs, seeds and fertilizers.
- Keep out of reach of children, uninformed persons and animals.
- Do not apply by air.
- **Re-entry:** Do not enter treated area until spray deposit has dried, unless wearing protective clothing.
- In case of poisoning call a physician and show this label 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 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 fumes or spray mist.
- Wear protective clothing, face shield and gloves when handling the concentrate.
- Wash immediately with soap and cold water after accidental skin contact.
- Take off contaminated clothing and wash clothing daily.
- Do not eat, drink or smoke when mixing or applying or before hands and face have been washed.
- Avoid spray drift onto adjacent areas, other crops, grazing, rivers, dams, other water sources and areas not under treatment.
- After use, clean applicator and discard wash water where it will not contaminate grazing, rivers, dams or crops.
- Invert the empty container over the spray 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 of at least 10 % of that of the container. Add the rinsings to the contents of the spray tank before destroying the empty container.
- Destroy the empty container by perforating and flattening it and NEVER re-use for any purpose.

- Prevent contamination of food, feedstuffs, eating utensils and drinking water.

## FIRST AID TREATMENT

**General:** In case of exposure call the emergency contact centre or seek medical advice immediately.

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

**Ingestion:** Do NOT induce vomiting. 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 physician for treatment advice.

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

## NOTE TO PHYSICIAN

Treat symptomatically and give supportive therapy.

## RESISTANCE WARNING

For the purpose of resistance management **PLEMAX** is classified as a group code 22A and 15 insecticides. Any insect population may contain individuals naturally resistant to **PLEMAX** and other group code 22A and 15 insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **PLEMAX** or any other group code 22A and 15 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 specific information on resistance management contact the registration holder of this product.

## USE RESTRICTIONS

- Do not use on Comice pears.
- Do not use in grape vines or allow the spray to drift over vines, as novaluron could be phytotoxic to grapes.

## DIRECTIONS FOR USE

**Use only as indicated.**

### General

**PLEMAX** is a combination of two active substances with different modes of action, namely indoxacarb and novaluron.

Indoxacarb belongs to the oxadiazine class, and is a broad-spectrum Lepidoptera insecticide, which is also active against certain other pests. Though mainly acting through ingestion, it can also be

absorbed through the cuticle. Indoxacarb acts by blocking sodium ion movement into certain nerve cell ion channels, leading to paralysis and death of the pest.

Novaluron, an insecticide of the benzoylphenyl urea class, is an insect growth regulator and therefore disrupts normal growth and development of immature insects. It inhibits chitin synthesis, affecting the moulting stages of insect development, and acts as an ovicide and larvicide. It acts mainly by ingestion, but has some contact activity.

### Compatibility

When **PLEMAX** is tank mixed with other insecticides or fungicides, it is advisable always to carry out a physical compatibility test prior to application.

### Mixing instructions

Half fill the spray tank with clean water. Pre-mix the required quantity of **PLEMAX** in a small volume of water and add to the spray tank while agitating. Fill the spray tank with water to the required volume. 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

**PLEMAX** 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	DOSAGE	REMARKS
<b>Apples and pears</b> Codling moth ( <i>Cydia pomonella</i> ) Banded fruit weevil (snoutbeetle) ( <i>Phlyctinus callosus</i> )	30 ml/100 L water	Apply a maximum of three applications of <b>PLEMAX</b> per season, starting at 75 % petal fall. Apply as a full cover spray, ensuring thorough coverage. Calculate the spray volume to be applied per hectare according to the tree-row-volume formula described by Unrath.  To avoid the development of resistance, apply products with a different mode of action against the next codling moth generations or when further applications for control of banded fruit weevil are required.  Note that to obtain the maximum ovicidal effect from novaluron, it is recommended that the first application of a product containing novaluron is made just before flowering.  Do not apply more than 4 applications of products containing novaluron or 3 applications of products containing indoxacarb per season.

CROP AND TARGET	DOSAGE	REMARKS
<p><b>Maize and sweetcorn</b></p> <p>Fall army worm (<i>Spodoptera frugiperda</i>)</p> <p><b>(Emergency registration)</b></p>	<p>400–700 ml/ha</p>	<p>Apply <b>PLEMAX</b> as a full cover spray, preferably early in the life cycle when eggs and small larvae are present, and before larvae migrate into the maize ears.</p> <p>The application rate depends on the level of infestation. Apply in an integrated pest management programme, alternating with products with a different mode of action, at intervals of 7 days. Start with control measures as soon as pest is observed in the production region.</p> <p>Apply one application during the growing season.</p> <p><b>Emergency registration:</b> Please note that when a product has been approved for the purpose of emergency registration, it is still under evaluation with regard to efficacy, selectivity and behaviour of residues in the particular crop. Environmental and human safety data have already been evaluated and approved at initial registration of the product.</p>

## WAARSKUWINGS

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

<b>Appels, pere</b> .....	28 dae
<b>Mielies, soetmielies</b> .....	63 dae

- Hanteer versigtig.
- Giftig indien dit ingesluk of ingeasem word of met die vel in kontak kom.
- Velkontak mag sensitisering veroorsaak.
- Giftig vir visse en ander waterdiere.
- Berg in 'n koel, droë en goed geventileerde plek weg van voedsel, voer, saad en misstowwe.
- Hou buite bereik van kinders, oningeligte persone en diere.
- Nie vir lugtoediening nie.
- **Herbetreding:** Moet nie die behandelde gebied betree totdat die spuitstof droog is nie, tensy beskermende klere gedra word.
- In geval van vergiftiging moet 'n geneesheer gekontak word en hierdie etiket aan hom/haar getoon 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 klimaats-, grond- 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 mens of dier 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 geval van enige onsekerheid.**

## VOORSORGMAATREËLS

- Vermy inaseming van spuitnewel of dampe.
- Dra 'n gesigskerm, beskermde klere en rubberhandskoene wanneer konsentreer hanteer word.
- Was dadelik met koue water en seep indien dit per ongeluk met die vel in aanraking kom.
- Trek besoedelde klere uit en was dit daagliks.
- Moet nie eet, drink of rook gedurende vermenging of toediening of voordat hande en gesig gewas is nie.
- Voorkom die wegdrywing van spuitnewel na aangrensende gebiede, ander gewasse, weiding, riviere, damme, enige ander waterbronne en gebiede wat nie behandel moet word nie.
- Na gebruik, Maak spuitapparaat skoon na gebruik en gooi waswater weg waar dit nie gewasse, weiding, riviere of damme sal besoedel nie.
- Keer die leë houer om oor die spuit- of mengtenk en laat dit dreineer vir ten minste 30 sekondes nadat die vloei tot 'n gedrup oorgegaan het. Spoel die leë houer daarna drie keer uit met 'n volume water gelykstaande aan minstens 10 % van die volume van die houer. Gooi die spoelwater in die meng- of spuittenk voor die leë houer vernietig word.

- Vernietig leë houer deur gate daarin te maak en plat te slaan. Moet NOOIT 'n leë houer vir enige doeleindes hergebruik nie.
- Verhoed besoedeling van voedsel, voer, drinkwater en eetgerei.

## NOODHULPBEHANDELING

**Algemeen:** Skakel dadelik die noodkontaksentrum of 'n mediese praktisyn in geval van besoedeling.

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

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

**Velkontak:** Verwyder besoedelde klere en skoene, was met groot hoeveelheid koue water en seep. Skakel die noodkontaksentrum of '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 na die eerste 5 minute en gaan dan voort om te spoel. Skakel die noodkontaksentrum of 'n mediese praktisyn vir raad oor behandeling.

## NOTA AAN GENEESHEER

Behandel simptome met ondersteunende terapie.

## WEERSTANDSWAARSKUWING

Vir die doel van weerstandsbestuur is **PLEMAX** as 'n IRAC groepkode 22A en 15 insekdoder geklassifiseer. Enige insekbevolking mag individue bevat wat 'n natuurlike weerstand teen **PLEMAX** en ander groepkode 22A en 15 insekdoders het. Die weerstandbiedende individue kan uiteindelik die insekbevolking oorheers as hierdie insekdoders herhaaldelik gebruik word. Hierdie weerstandbiedende insekte mag dalk nie deur **PLEMAX** of enige ander groepkode 22A en 15 insekdoders beheer word nie.

Om insekdoderweerstand te vertraag:

- Vermy 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.

## GEBRUIKSBEPERKINGS

- Moet nie op Comice pere gebruik nie.
- Moet nie op wingerde gebruik nie of toelaat dat die spuitnewel oor die wingerde wegdryf nie, aangesien novaluron fitotoksies kan wees vir duiwe.

## GEBRUIKSAANWYSINGS

Gebruik alleenlik soos voorgeskryf.

### Algemeen

**PLEMAX** is 'n kombinasie van twee aktiewe bestanddele met verskillende metodes van werking, naamlik indoxacarb en novaluron.

Indoxacarb behoort aan die oksadiazien-klas, en is 'n breëspektrum Lepidoptera insekdoder, wat ook aktief is teen ander soorte plae. Hoewel indoxacarb hoofsaaklik deur inname werk, kan dit ook geabsorbeer word deur die kutikula. Indoxacarb werk deur die inbeweging van natrium-ione in sekere senuweesel-ioonkanale te blokkeer, wat lei tot die verlamming en dood van die plaag.

Novaluron, 'n insekdoder van die bensoïelfenielureum-klas, is 'n insekgroeireguleerder en ontwrig gevolglik normale groei en ontwikkeling van onvolwasse insekte. Dit inhibeer chitiensintese en het dus 'n effek tydens die vervellingstadium van insekontwikkeling, en tree op as eierdoder en larfdoder. Die werking is hoofsaaklik deur inname (maagaksie), maar dit het ook 'n kontakaksie.

### Verenigbaarheid

Wanneer **PLEMAX** in tenkmengsels met ander insekdoders of swamdoders gebruik word, word dit aanbeveel dat 'n fisiese verenigbaarheidstoets altyd voor toediening gedoen word.

### Menginstruksies

Vul die spuittenk half vol met skoon water. Meng die benodigde volume **PLEMAX** vooraf met water en voeg dit in die spuittenk by terwyl dit geroer word. Vul die spuittenk tot die verlangde volume met water. Maak seker dat konstante en effektiewe roering plaasvind gedurende meng en toediening. Maak net genoeg spuitmengsel aan vir een dag se toediening. Moet nie spuitmengsel oornag laat staan nie.

### TOEDIENING

**PLEMAX** 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
<p><b>Appels en pere</b> Kodlingmot (<i>Cydia pomonella</i>) Gebande vrugtekalander (snuitekewer) (<i>Phlyctinus callosus</i>)</p>	<p>30 ml/100 L water</p>	<p>Dien 'n maksimum van drie toedienings <b>PLEMAX</b> per seisoen toe, en begin by 75 % blomblaarval. Dien toe as 'n vol-dekbespuiting en verseker deeglike bedekking. Bereken die spuitvolume wat toegedien moet word per hektaar volgens die boom-ry-volume metode van Unrath.</p> <p>Om die ontwikkeling van weerstand te voorkom, moet produkte met 'n ander meganisme van werking teen die volgende kodlingmotgenerasies gebruik word of wanneer daar verdere toedienings vir die beheer van snuitkewer verlang word.</p> <p>Let wel, om die maksimum eierdodende effek van novaluron te verkry, word dit aanbeveel dat die eerste toediening van 'n produk wat novaluron bevat net voor blom gemaak word.</p> <p>Moet nie meer as 4 toedienings maak van produkte wat novaluron bevat nie, of nie meer as 3 toedienings van produkte wat indoxacarb bevat nie.</p>
<p><b>Mielies en soetmielies</b> Herfs-kommandowurm (<i>Spodoptera frugiperda</i>) <b>(Noodregistrasie)</b></p>	<p>400–700 ml/ha</p>	<p>Dien <b>PLEMAX</b> as 'n vol-dekbespuiting toe, verkieslik vroeg in die lewensiklus wanneer eiers en klein larwes teenwoordig is en voordat die larwes in die mieliekoppe begin inbeweeg.</p> <p>Die toedieningsdosis word bepaal deur die vlak van infestasië. Dien toe in 'n geïntegreerde plaagbestuurprogram en wissel af met produkte wat 'n ander meganisme van werking het, teen intervale van 7 dae. Begin met die toepassing van beheermaatreëls wanneer die plaag in die produksiestreek opgemerk word.</p> <p>Dien een maal tydens die groeiseisoen van die gewas toe.</p> <p><b>Noodregistrasie:</b> Let daarop dat wanneer die gebruik van 'n produk vir die doel van noodregistrasie goedgekeur is, dit steeds geëvalueer word vir effektiwiteit, selektiwiteit, en die gedrag van residuë in die spesifieke gewas. Omgewings- en menslike veiligheidsdata is reeds geëvalueer en goedgekeur by die aanvanklike registrasie van die produk.</p>