

READ THE LABEL BEFORE USE. KEEP OUT OF REACH OF CHILDREN AND ANIMALS.

Insecticide



# LESSON 50 EC

Reg. No. L 9256 Act No. 36 of 1947  
N-AR 1905 / W1301437

5: 17/06/2025 – June2025

An emulsifiable concentrate residual contact acaricide for the control of pests as listed.

## ACTIVE INGREDIENT

fenpyroximate

50 g/l

GROUP

21A

INSECTICIDE



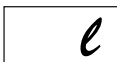
### Hazard Statements:

Combustible liquid.  
May be harmful if swallowed.  
May be fatal if swallowed and enters airways.  
Causes mild skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye damage.  
Toxic if inhaled.  
Very toxic to aquatic life with long lasting effects.

### Precautionary Statements:

Avoid breathing mist, vapours and spray.  
Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.  
Avoid release into the environment.

**DANGER**



**villa**



UN Number: 2902

Registration holder: UNIVERSAL CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1983/008184/07

65 Botes Road, Glen Marais, Kempton Park, 1619

Tel. (011) 396 2233

Website: [www.villacrop.co.za](http://www.villacrop.co.za)

**IN CASE OF POISONING / 24 HR EMERGENCY NUMBERS:**

Griffon Poison Information Centre (National): +27 82 446 8946

Poison Information Helpline (National): +27 861 555 777

24 Hr Transport / Spill emergency no: (Hazcall24) +27 86 044 4411

(Client: Villa Crop Protection)

DIRECTIONS FOR USE ENCLOSED  
Batch Number: \_\_\_\_\_  
Expiry Date: \_\_\_\_\_  
Date of Manufacture: \_\_\_\_\_

REFER TO DETAILS AS PRINTED ON CONTAINER / BAG

**LESSON 50 EC**

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N-AR 1905 / W 1301437

IRAC INSECTICIDE GROUP CODE: 21A

**ACTIVE INGREDIENT:**

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**WARNINGS****Withholding periods:**

Minimum time between the last application and harvest:	
Apples and Pears	30 days
Citrus (including Lemons, Limes, Mandarins, Grapefruit, Oranges and Tangerines)	28 days
Peppers	14 days
Tomatoes	7 days
Grapes	40 days
Stone fruit (including Apricots, Nectarines, Peaches, Cherries)	21 days

**NOTE**

IN THE CASE OF CROPS INTENDED FOR EXPORT, CONFIRM WITHHOLDING PERIODS WITH THE RELEVANT EXPORT ORGANISATION. IF THIS PRODUCT IS USED ACCORDING TO THE RECOMMENDATIONS ON THIS LABEL, LOCAL MRL VALUES WILL NOT BE EXCEEDED. HOWEVER, VILLA CROP PROTECTION (PTY) LTD. CANNOT ACCEPT RESPONSIBILITY FOR EXPORTED FRUIT EXCEEDING THE IMPORT TOLERANCES OF OTHER COUNTRIES.

**Hazard statements:**

Combustible liquid.
May be harmful if swallowed.
May be fatal if swallowed and enters airways.
Causes mild skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
Toxic if inhaled.
Very toxic to aquatic life with long lasting effects.

- Handle with care.
- Toxic to wildlife.
- Safe to natural enemies.
- Store in a cool, dry place away from food, feeds, fertilizers and other agricultural remedies.
- Keep out of reach of children, animals and uninformed persons.
- Use of this material in a manner or at a time other than in accordance with the directions may cause excessive residues or other undesirable results.
- Re-entry: Do not enter treated area until spray deposit has dried unless wearing protective clothing.

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 further does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for lack of performance of the remedy concerned, due to failure of the user to follow the label instructions or to the occurrence of conditions, which could not have been foreseen in terms of the registration. Consult the supplier in event of any uncertainty.

## PRECAUTIONS

### Precautionary statements:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Avoid breathing mist, vapours and spray.
Wash hands thoroughly after handling. Do not touch eyes.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release into the environment.
Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
IF SWALLOWED OR INHALED: Get emergency medical help immediately.
IF ON SKIN: Wash with plenty of water and non-abrasive soap.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help.
Do NOT induce vomiting.
If skin irritation or rash occurs: Get medical help.
Collect spillage.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container to suitable landfill in accordance with local regulations.

- Avoid eye and skin contact.
- Do not enter treated areas until the sprayed solution has dried.
- Wash contaminated clothing after use.
- Do not eat, drink or smoke whilst mixing, applying the product or before washing hands and face or change of clothing.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean the applicator thoroughly after use and dispose of wash water where it will not contaminate food, grazing, rivers or dams.
- **TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS:** Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container three times in succession with one quarter of 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, burn or donate the container to any other parties that may use it as a container for food or beverages.
- **Never** re-use the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

## SYMPTOMS OF HUMAN POISONING

Symptoms that may arise if the product is mishandled and overexposure occurs are: mild skin irritation, serious eye injury, nausea, vomiting, diarrhoea, profuse sweating, headache, abdominal pain, ataxia, unsteady gait, hyperexcitability, salivation, tremors, incontinence, dizziness, drowsiness, agitation, weakness, coma and in severe cases, seizures.

## FIRST AID TREATMENT

- Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure and if symptoms persist, consult a doctor.
- **Skin:** Remove contaminated clothing, shoes and leather goods. Wash skin gently and thoroughly with cold water and non-abrasive soap. **Obtain medical attention if irritation or rash occurs.**
- **Eyes:** Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. **Seek medical attention.**
- **Inhalation:** If vapours or mists have been inhaled, move victim to fresh air and remove source of contamination if safe to do so. The patient should be kept under observation. **Obtain medical attention immediately.**
- **Ingestion:** **Do not induce vomiting due to the aromatic solvent.** Do not give anything by mouth to an unconscious person. **Obtain medical attention immediately.** If the person is alert, rinse mouth thoroughly with water.

**NOTE TO PHYSICIAN**

There is no specific antidote available. Treat symptomatically and supportively. Prevent aspiration.

<b>Relevant hazardous components</b>	
Fenpyroximate	50 g/ℓ
Calcium dodecylbenzene sulfonate	<50 g/ℓ
Solvent naphtha (petroleum), heavy aromatic	<950 g/ℓ

**NOTE:** The ingredients listed above contribute to the overall GHS classification, the remaining ingredients do not have to be listed according to the South African Regulations for Hazardous Chemical Agents 2021, Regulation 14(b).

**In case of poisoning, call the following number:** +27 82 446 8946 (Griffon Poison Information Centre) or +27 861 555 777 (Poison Information Helpline).

**In case of a chemical spill call the following 24 Hr Transport / Spill emergency number:** +27 86 044 4411 (Hazcall24 / Client: Villa Crop Protection).

**RESISTANCE WARNING**

**LESSON 50 EC** is a group code 21A insecticide. Any pest population may contain individuals naturally resistant to **LESSON 50 EC** and other group code 21A insecticides. The resistant individuals can eventually dominate the pest population if these insecticides are used repeatedly. These resistant pests may not be controlled by **LESSON 50 EC** or any other group code 21A insecticide.

To delay insecticide resistance:

- avoid exclusive repeated use of insecticides from the same insecticide group code. Alternate with products from different insecticide group codes,
- integrate other control methods (chemical, cultural, biological) into Insect Pest Management programmes.

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

**Mode of Action:**

**Fenpyroximate** is an electron transport inhibitor (inhibitor of mitochondrial electron transport at complex I) that belongs to IRAC mode of action group 21A. It has a quick knockdown activity against larvae, nymphs and adults, mainly by contact and ingestion, as well as some moulting inhibitory activity on nymphs.

**GENERAL INFORMATION**

**LESSON 50 EC** is most effective against mobile stages of Mites and therefore optimum control is obtained when applications coincide with periods of maximum egg hatch. Inspection of orchards and/or crops is essential to ensure proper timing of **LESSON 50 EC** applications.

**IMPORTANT – RESISTANCE MANAGEMENT**

**DON'T EXCEED MORE THAN ONE LESSON 50 EC TREATMENT PER GROWING SEASON, EXCEPT IN GRAPES WHERE TWO APPLICATIONS CAN BE MADE. IT IS IMPORTANT TO APPLY ANOTHER IRAC GROUP CODE ACARICIDE (THUS NOT A GROUP 21 PRODUCT) TO THE SAME CROP IN THE SAME GROWTH SEASON AS LESSON 50 EC, IF MRL REQUIREMENTS ALLOW SUCH AN APPLICATION.**

**DIRECTIONS FOR USE:** Use only as directed.

**NOTICE TO USER:**

Read the entire label before application. This agricultural remedy is to be used only in accordance with the instructions on the label. It is an offence under the Act to use this agricultural remedy for any purpose in a manner contrary with the directions on the label.

**Compatibility:**

- **LESSON 50 EC** is compatible with **PICANTA** (L 8871 / N-AR 1503).
- **LESSON 50 EC** can be mixed with **Cryptex**® (L 8037) provided the pH of mixture is between 5 to 8 when the **Cryptex**® is added to the mixing unit.
- The compatibility of **LESSON 50 EC** with other products has not been investigated and may be influenced by several factors. As these factors may vary, a physical compatibility test must always be performed before such a tank mixture is sprayed.
- When **LESSON 50 EC** is used in conjunction with any other agricultural remedy, adhere to all **WARNINGS, PRECAUTIONS** and **DIRECTIONS FOR USE** mentioned on the relevant labels.

**Mixing instructions:**

- Half fill the spray tank with clean water.
- Ensure agitation of the water in the spray tank and add the required quantity of **LESSON 50 EC**.
- Fill the spray tank with water to the required final volume while maintaining agitation.
- Maintain agitation while spraying.
- Prepared spray mixture must not be left in the spray tank for any length of time, e.g. overnight. Ensure that agitation takes place for a few minutes prior to commencement of spraying after normal operational stops, e.g. lunch break.

**Application instructions:**

- Ground application Citrus only: Apply as a medium volume, full cover spray using a spray mixture volume of 5 to 6 litres per one (1) metre tree height above canopy skirt or tree diameter, ensuring thorough wetting.
- Calibrate the spraying equipment before application, ensuring that the correct volume per hectare and droplet size is applied.
- It is important that all applications be performed with suitable equipment that is in good working order and correctly calibrated, to give the desired coverage for that particular method of application.

**Deciduous Fruit Trees:**

- Apply **LESSON 50 EC** as a high volume (HV) application to deciduous fruit trees. Calculate the rate per hectare according to the formula for High Volume Requirements HVR, using “*Unrath’s Formula*” for “*Tree Row Volume*” (TRV).

$$\text{TRV} = \frac{\text{Tree Height (TH)} \times \text{Tree Width (TW)} \times 937}{\text{Distance between Rows (RW)}} = \text{HVR in litres per hectare}$$

\* Tree height and tree width should be measured during summer when trees are in full flush)

**Directions for application volumes at different growth stages and the calculation of rate per hectare, based on High Volume Requirements (HVR):**

<b>Growth Stage</b>	<b>Application Volume</b>
Bud break to Full Blossom	60 % of HVR
75 % Petal fall to (1) one month later (Mid-season)	80 % of HVR
Mid-season to Post harvest, before Leaf drop	100 % of HVR

$$\text{Rate per ha} = \frac{\text{HVR in } \mu\text{g/ha} \times \text{Rate per 100 litres}}{100}$$

**Post Spray Equipment Cleaning**

It is essential to rinse the spray tank and all hoses with a 0.1 % solution of either calcium chloride or ammonium hydroxide or the recommended rate of **Protank**® liquid cleaner according to the product label. Allow this solution to stand in the spray equipment for 15 minutes; empty the spray equipment; repeat the rinsing with a 0.1 % solution of calcium chloride or ammonium hydroxide for 15 minutes; rinse all equipment with water. Nozzles and fitters must be cleaned individually. Rinse water and solution should be drained in a cesspool or drain where it will not contaminate any water source.

**APPLICATION RATES**

<b>Crop / Pest</b>	<b>Dosage Rate</b>	<b>Remarks</b>
<b>Orchards</b> Scout orchards regularly to determine Mite infestation levels. Commence with application at first signs of infestation. Ensure good coverage of all parts of the tree, especially the undersides of the leaves. Refer “ <b>GENERAL INFORMATION</b> ” above.		
<b>Apples and Pears</b> Two-spotted spider mite (previously known as Red spider mite) ( <i>Tetranychus urticae</i> )  European red mite <i>Panonychus ulmi</i>	150 ml / 100 l water (15 ml / 10 l water)	Apply according average mite scouting counts as follows: <u>Apples</u> - 2 female mites per leaf up to the end of March and 1 female mite per leaf thereafter (red phase) or 40 % leaf infestation (green phase). <u>Pears</u> - 1 female mite per leaf.  Apply as high volume spray according to the Tree-Row-Volume to determine the dosage rate per hectare (as described in “ <i>Deciduous Fruit Grower</i> ”, Volume 36, November 1986 and supplemented in later publications). See “ <b>Application instructions</b> ” above.  <b>LESSON 50 EC</b> can also be applied as concentrate spray.
<b>Citrus</b> (including Lemons, Limes, Mandarins, Grapefruit, Oranges and Tangerines)  Bud mite ( <i>Aceria sheldoni</i> )  Citrus rust mite ( <i>Phyllocoptruta oleivora</i> )  Lowveld citrus mite ( <i>Eutetranychus orientalis</i> )  Citrus flat mite ( <i>Brevipalpus californicus</i> )  Citrus silver mite, ( <i>Polyphagotarsonemus latus</i> )  Citrus grey mite ( <i>Calacarus citrifolii</i> )  Citrus red mite ( <i>Panonychus citri</i> )	150 ml / 100 l water (15 ml / 10 l water)	<u>Ground application:</u> Apply a single treatment during the period February to April. Apply as a medium volume full cover application at 5 to 6 litres spray mixture per metre tree height above canopy skirt or tree diameter. Ensure thorough wetting of the target area.  <b>LESSON 50 EC</b> can be applied in a tank mixture with <b>Cryptex</b> <sup>®</sup> (3.3 ml per 100 litres water [minimum 200 ml to maximum 330 ml per hectare] <b>PLUS</b> 0.5 % molasses [0.5 litre per 100 litres water]) for additional control of False Codling Moth.  Refer to “ <b>Compatibility</b> ” above if used in tank mixture with <b>Cryptex</b> <sup>®</sup> or other products.
Mealybug ( <i>Planococcus citri</i> )	200 ml / 100 l water (20 ml / 10 l water)	Apply as a full cover spray at the onset of first crawler movement. Only apply one (1) application per season.

<b>Crop / Pest</b>	<b>Dosage Rate</b>	<b>Remarks</b>
<b>Stone fruit</b> (Including Apricots, Nectarines & Peaches, Cherries)  Two-spotted mite (previously known as Red spider mite) ( <i>Tetranychus urticae</i> )	170 ml / 100 ℓ water (17 ml / 10 ℓ water)  <b>PLUS</b>  <b>Picanta</b> 50 ml / 100 ℓ water (5 ml / 10 ℓ water)	Commence treatment when scouting indicates 3 to 5 Mites per leaf. Only apply one (1) application per season. Ensure thorough coverage of all parts of the tree, especially the undersides of the leaves.  Apply as a medium cover spray (3 to 4 litres spray mixture per 1 m tree height above skirt). (Refer “ <b>GENERAL INFORMATION</b> ” above).
<b>Grapes</b> Grape vine bud mite / Leaf blister mite ( <i>Colomerus vitis</i> [= <i>Eriophyes vitis</i> ])	125 ml / 100 ℓ water (12.5 ml / 10 ℓ water)	Apply two (2) treatments, the first application when shoots are 10 cm long. Follow 14 days later with second treatment. Apply as high volume, full cover sprays (400 to 500 litres water per hectare). Ensure thorough wetting of the cordon arms.
<b>Peppers</b> Two-spotted spider mite (previously known as Red spider mite) ( <i>Tetranychus urticae</i> )	150 ml / 100 ℓ water (15 ml / 10 ℓ water)  <b>PLUS</b>  <b>Picanta</b> (50 ml / 100 ℓ water) (5 ml / 10 ℓ water)	Commence treatment when all stages of the Mites are present and mobile stages exceed 10 per 10 cm <sup>2</sup> on 30 % of the leaves sampled. Apply as a high-volume spray ensuring good penetration and coverage of all plant parts, especially the undersides of the leaves.
<b>Tomatoes</b> Two-spotted mite (previously known as Red spider mite) ( <i>Tetranychus urticae</i> )	150 ml / 100 ℓ water (15 ml / 10 ℓ water)	Commence with treatment when a Population Index of (1 up to 3 Mites per leaf) is reached (refer to “ <b>Scouting instructions</b> ” below). Apply as a full cover spray using a sufficient water volume, to ensure thorough coverage (especially the underside of the leaves).
<b>NOTE</b> <b>Scouting instructions for Two-spotted mites (previously known as Red spider mites) on tomatoes and peppers</b> <ul style="list-style-type: none"> <li>Scout 48 plants on a weekly basis.</li> <li>For each plant choose three (3) leaves, one (1) in the middle and two (2) at the top of the plant.</li> <li>Count the number of adult females (visible red stages) on the three (3) leaves and record the total as follows: <div style="margin-left: 20px;"> 0 Mites = 0  1 to 10 = 1  11 to 30 = 2  &gt; 30 mites = 3 </div> </li> <li><b>DO NOT APPLY LESSON 50 EC WHEN A POPULATION INDEX OF 1 IS EXCEEDED.</b></li> </ul>		

Refer to all **WARNINGS, PRECAUTIONS** and **DIRECTIONS FOR USE** as listed on the **Cryptex®** label.

**PICANTA** is a registered product of  
**VILLA CROP PROTECTION (PTY) LTD.**

**CRYPTEX®** is a registered trademark of  
**MADUMBI SUSTAINABLE AGRICULTURE (PTY) LTD.**

**PROTANK® LIQUID CLEANER** is a registered product of  
**WINFIELD SOLUTIONS REGISTRATION HOLDINGS (PTY) LTD.**