DIRECTIONS FOR USE ENCLOSED

RESTRICTED USE AGRICULTURAL REMEDY

THIS REMEDY IS RESTRICTED DUE TO ACUTE TOXICITY. THIS REMEDY MAY ONLY BE SOLD TO AND USED BY A REGISTERED PEST CONTROL OPERATOR, OR BY SOMEONE UNDER THE SUPERVISION OF A REGISTERED PEST CONTROL OPERATOR, AND ONLY FOR THOSE USES COVERED BY THE PEST CONTROL OPERATOR'S SCOPE OF REGISTRATION, AND ONLY AS DIRECTED ON THIS LABEL.

## Insecticide



# CRYSTAL 550 SC

Reg. No. L 9050 Act No. 36 of 1947 W 1301790 6: 14/11/2024 - Nov2024

A suspension concentrate contact and residual acaricide with anti-feeding properties for the control of Red spider mite and European red mite on crops as listed.

#### **ACTIVE INGREDIENT**

GROUP 12B INSECTICIDE

fenbutatin oxide (organo tin) 550 g/e



DANGER

#### **Hazard Statements:**

May be harmful in contact with

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation. Fatal if inhaled.

Very toxic to aquatic life with long lasting effects.

#### **Precautionary Statements:**

IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Wear impervious rubber gloves and boots, protective clothing and chemical safety googles.



Registration holder: VILLA CROP PROTECTION (PTY) LTD.

Co. Reg. No.: 1992/002474/07
65 Botes Road, Glen Marais, Kempton Park, 1619
Tel. (011) 396 2233
Website: 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): +27 861 587 427 86 104 4411 (Client: Villa Crop Protection)

#### CRYSTAL 550 SC

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**IRAC INSECTICIDE GROUP CODE: 12B** 

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#### **WARNINGS**

Withholding periods:

Allow the following number of days between the last application and harvest or grazing of the crops listed below:		
Peppers, Tomatoes, Green beans	3 days	
Citrus	7 days	
Peaches (fresh)	21 days	

#### **NOTE**

ABOVE-MENTIONED WITHHOLDING PERIODS REFER TO COMPLIANCE WITH LOCAL MAXIMUM RESIDUE LIMITS (MRL'S). HOWEVER, IT IS IMPORTANT TO NOTE THAT IMPORT TOLERANCES OF OTHER COUNTRIES MIGHT POSSIBLY BE EXCEEDED. IF THE TREATED CROP WILL BE EXPORTED, FIRST CONSULT THE RELEVANT IMPORTER OR EXPORTING BODY REGARDING THE USE OF THIS PRODUCT, MRL'S AND RECOMMENDED WITHHOLDING PERIODS.

#### **Hazard statements:**

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May be harmful in contact with skin.	
Causes skin irritation.	
May cause an allergic skin reaction.	
Causes serious eye irritation.	
Fatal if inhaled.	
Very toxic to aquatic life with long lasting effects.	

- Handle with care.
- Can cause irritation mucous membranes.
- Non-toxic to bees.
- Store in the original container in a cool, dry, well-ventilated place, away from food, feeds, seed, fertilizers and other agricultural remedies.
- 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. The action and effect thereof may be effected by factors such as abnormal climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label, 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 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**

## **Precautionary statements:**

Do not breathe dust, fume, gas, mist, vapours or 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.

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Avoid release into the environment.

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

In case of inadequate ventilation wear respiratory protection.

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: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation or rash occurs: Get medical help.

If eye irritation persists: Get medical help.

Take off contaminated clothing and wash it before reuse.

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.

- Prevent drift onto other crops, grazing, rivers, dams or areas not under treatment or to nearby water sources.
- Clean the spraying equipment directly after use and dispose of wash water where it will not contaminate food, grazing, boreholes, 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 <a href="www.croplife.co.za">www.croplife.co.za</a>. Do not bury, burn, or donate the container to any other parties that may use it as a container for food or beverages.
- Prevent contamination of food, feed, drinking water and eating utensils.

#### SYMPTOMS OF HUMAN POISONING

Causes serious eye irritation. May cause an allergic skin reaction and moderate to severe skin irritation. May cause irritation of the mucous membranes, respiratory tract, headache and nausea. Toxic if swallowed. It may cause headache, vomiting and nausea.

#### **FIRST AID TREATMENT**

- <u>Inhalation:</u> Remove the source of contamination or move the person to fresh air. If cough or other respiratory symptoms develop, consult medical personnel. If breathing stops, administer artificial respiration and **immediately seek medical attention.**
- <u>Skin:</u> Remove contaminated clothing, shoes and leather goods and do not re-use until thoroughly cleaned or laundered. Wash skin with non-abrasive soap and plenty of water for 15 to 20 minutes. **Obtain medical attention if irritation persists.**
- <u>Eye contact:</u> Immediately flush eyes with a stream of clean water for at least 20 minutes, holding the eyelid(s) open. **Obtain medical attention.**
- <u>Ingestion:</u> Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control centre or doctor. Never give anything by mouth to an unconscious person. Obtain medical attention immediately.

#### **NOTE TO PHYSICIAN**

There is no specific antidote available. Treat symptomatically.

Relevant hazardous components		
Fenbutatin oxide	550 g/ℓ	
Fatty acid methyl Tauride	< 50 g/ℓ	
Phenyl Sulphonate salt	< 15 g/ℓ	
Ethylene glycol	< 7 g/ℓ	
Proxel GXL	< 5 g/ℓ	

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**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).

**Mode of Action: CRYSTAL 550 SC** is a non-systemic acaricide active by both contact and ingestion. It inhibits mitochondrial ATP synthase resulting in disruption of ATP production.

#### **RESISTANCE WARNING**

**CRYSTAL 550 SC** is a group code 12B insecticide. Any insect population may contain individuals naturally resistant to **CRYSTAL 550 SC** and any other group code 12B insecticide. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **CRYSTAL 550 SC** or any other group code 12B insecticide. 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 other control methods (chemical, cultural, biological) into disease control programmes.

For specific information on resistance management, contact the registration holder of this product or consult the website of the Insecticide Resistance Action Committee (<a href="https://irac-online.org/">https://irac-online.org/</a>). If resistance is suspected, please consult your local company representative or agricultural advisor.

## **GENERAL INFORMATION**

**CRYSTAL 550 SC** acts 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 **CRYSTAL 550 SC** applications and therefore obtain the most effective control of Mites. **CRYSTAL 550 SC** can be expected to have an extended period of activity, but reduced activity can be obtained under colder weather conditions.

# RESTRICTED USE: Use only as directed.

THIS REMEDY IS RESTRICTED DUE TO ACUTE TOXICITY. THIS REMEDY MAY ONLY BE SOLD TO AND USED BY A REGISTERED PEST CONTROL OPERATOR, OR BY SOMEONE UNDER THE SUPERVISION OF A REGISTERED PEST CONTROL OPERATOR, AND ONLY FOR THOSE USES COVERED BY THE PEST CONTROL OPERATOR'S SCOPE OF REGISTRATION, AND ONLY AS DIRECTED ON THIS LABEL.

#### 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:

- CRYSTAL 550 SC is not compatible with dodine, alkaline substances, Lime sulphur, Sulphur or Bordeaux mixtures.
- The compatibility of CRYSTAL 550 SC may be influenced by several factors. As factors influencing
  compatibility may vary, a physical compatibility test must always be performed, before such tank mixture
  is sprayed.
- When CRYSTAL 550 SC 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.
- Shake the CRYSTAL 550 SC container thoroughly, immediately before use.
- Measure the required volume of **CRYSTAL 550 SC** and pre-mix this, with at least 10 litres water before adding to the contents of the spray tank.
- Fill the spray tank with water to the required level, while maintaining agitation, to ensure thorough mixing.

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- Ensure agitation during application, to keep solution in suspension.
- Prepared spray mixture must not be left in the spray tank for any length of time, e.g. overnight.

# Application:

Application of **CRYSTAL 550 SC** must be performed with suitable spraying equipment that is in good working order and correctly calibrated, to obtain the desired coverage for that particular method of application.

## **APPLICATION RATES**

Crop / Pest	Dosage Rate	Remarks	
Citrus 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. Repeat when necessary. Refer "GENERAL INFORMATION" above.			
Citrus red mite (Panonychus citri)	55 mℓ / 100 ℓ water	Apply as a medium cover spray onto foliage. Repeat when necessary.  Apply as a medium cover spray. Ensure good coverage of the fruit. Repeat when necessary.	
Lowveld mite (Eutetranychus orientalis)	55 mℓ / 100 ℓ water		
Flat mite (Brevipalpus californicus)	20 mℓ / 100 ℓ water		
Rust mite (Phyllocoptruta oleivora)	15 mℓ / 100 ℓ water		
Green beans Red spider mite	25 mℓ / 100 ℓ water	Commence as a high-volume application at first sign of an infestation. Ensure good coverage of all plan	
(Tetranychus urticae) (cinnabarinus))	OR	parts, especially on the underside of the leaves. Repeat as necessary. Apply a minimum of 500 m/	
	2.5 mℓ / 10 ℓ water	CRYSTAL 550 SC per hectare or 0.5 mℓ per 10 m². (Refer "GENERAL INFORMATION" above).	
Peaches Red spider mite (Tetranychus urticae (cinnabarinus))	55 mℓ / 100 ℓ water	Commence application as soon as Mite numbers increase, but before reaching the economic threshold for the crop. Apply as a full cover spray. Ensure thorough coverage of all parts of the tree, especially the underside of the leaves. Repeat when necessary. (Refer "GENERAL INFORMATION" above).	
Peppers Red spider mite (Tetranychus urticae (cinnabarinus))	25 mℓ / 100 ℓ water  OR	Apply as a high-volume spray application at first signs of an infestation. Ensure good penetration and coverage of all plant parts, especially the underside of the leaves. Repeat as necessary. Apply a minimum	
	2.5 mℓ / 10 ℓ water	of 500 m/ CRYSTAL 550 SC per hectare or 0.5 m/ per 10 m <sup>2</sup> . (Refer "GENERAL INFORMATION" above).	
Tomatoes Red spider mite (Tetranychus urticae (cinnabarinus))	25 mℓ / 100 ℓ water	High volume applications: Commence spraying at first signs of infestation. Thorough coverage of all plant parts, especially the	
	OR	underside of the leaves, is important. Apply up to 2500 litres spray mixture per hectare depending on plant height and density. Repeat as necessary. Apply a minimum of 500 m/ CRYSTAL 550 SC per	
	2.5 mℓ / 10 ℓ water	hectare or 0.5 m/ per 10 m². (Refer "GENERAL INFORMATION" above).	
	500 mℓ / ha	Low volume applications: Apply in sufficient water, to obtain complete coverage of all parts of the plant. Repeat as necessary. (Refer "GENERAL INFORMATION" above).	

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