



Insecticide

KIRON 500 SC

Reg. No. L 10695 Act No. 36 of 1947

3: 23/11/2023 – Jan2024

A suspension concentrate insecticide for the control of the agricultural pests in the crops as indicated.

ACTIVE INGREDIENT

diafenthuron (thio-urea)

500 g/l

GROUP

12A

INSECTICIDE



WARNING

Hazard Statements:

May be harmful if swallowed.
May be harmful in contact with skin.
Harmful if inhaled.
May cause damage to organs (not specified) through prolonged or repeated exposure.
Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

IF SWALLOWED: Get medical help.
IF ON SKIN: Get medical help.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help.

DIRECTIONS FOR USE ENCLOSED

Batch Number:
Date of Manufacture:



villa 

UN Number: 3082

Registration holder: UNIVERSAL CROP PROTECTION (PTY) LTD.
Co. Reg. No. 1983/008184/07
PO Box 801, Kempton Park, 1620
Tel. (011) 396 2233
Website: www.villacrop.co.za

24 HR EMERGENCY NUMBERS:
Griffon Poison Centre: +27 82 446 8946
24 HR Transport / Spill Emergency no: (Hazzcall24) +27 86 044 4411
(Client: Villa Crop Protection)

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IRAC INSECTICIDE GROUP CODE: 12A

ACTIVE INGREDIENT:

diafenthiuron (thio-urea).....500 g/l

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UNIVERSAL CROP PROTECTION (PTY) LTD.

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P.O. Box 801, KEMPTON PARK, 1620, Tel. (011) 396 2233.

WARNINGS**Withholding periods:**

| Allow the following minimum number of days between application and harvest or feeding: | |
|--|--------|
| Tomatoes | 4 days |

NOTE

THE 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:

| |
|--|
| May be harmful if swallowed. |
| May be harmful in contact with skin. |
| Harmful if inhaled. |
| May cause damage to organs (not specified) through prolonged or repeated exposure. |
| Very toxic to aquatic life with long lasting effects. |

- Handle with care.
- Irritating to eyes.
- Toxic to bees.
- Store in the original closed container in a cool, dry place, well-ventilated place away from direct sunlight and damp.
- Avoid storage below 0°C and above 35°C.
- Once the container has been opened, the product should be used within a few days.
- Store away from food, feed and fertilizers.
- Keep under lock and key in the original, tightly closed container.
- Keep out of reach of children, uninformed persons and animals.
- Do not use this product in any way contrary to the directions on this label.
- **KIRON 500 SC** has been tested on the most important commercial cultivars without any phytotoxic effects. More susceptible cultivars may be released in future which need to be tested; for this apply **KIRON 500 SC** to a limited test area before commercial applications are made.
- **Re-entry:** Do not enter treated area until the 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 effective under all conditions. The activity 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 against the remedy, 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 by 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

Precaution statements:

| |
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| Avoid breathing dust, fume, gas, mists, vapours or spray. |
| Use only outdoors or in a well-ventilated area. |
| Avoid release into the environment. |
| IF SWALLOWED: Get emergency medical help immediately. |
| IF ON SKIN: Get medical help. |
| IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help. |
| Collect spillage. |
| Dispose of contents/container to suitable landfill in accordance with local regulations. |

- Avoid contact with eyes and skin.
- Wear rubber gloves and face shield when mixing and applying.
- Wash with soap and water after use.
- Wash contaminated clothing after use.
- Do not eat, drink or smoke while mixing or applying the product or before washing hands and face and changing clothing.
- Prevent contamination of food, feeds, drinking water and eating utensils.
- Wear rubber gloves and face shield when handling the concentrate. If you get this product in your eyes, flush it out at once. Flush eyes with plenty of clean water for at least 15 minutes whilst holding eyelids open. Remove contact lenses. If you get the product on your skin, wash off with plenty of non-abrasive soap and water. If you spill this product on your clothes, change and wash them.
- **Never** re-use the empty container for any other purpose.
- While spraying, avoid contact with the spray as much as possible.
- Avoid contamination of other crops, grazing, rivers, dams and areas not under treatment.
- Clean applicator after use. Dispose of rinsate where it will not contaminate crops, grazing, rivers, dams and boreholes or any other areas not under treatment.
- Change and wash your work clothes. Wash yourself.
- Spillage: Soak up with sand, sawdust or soil and shovel into waste containers.
- Do not contaminate stagnant or running water by disposal of waste.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- **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 (3) 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). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.

| Relevant hazardous components | |
|-------------------------------|----------|
| Diafenthiuron | 500 g/l |
| MEG | < 55 g/l |
| Soprophor BSU | < 30 g/l |
| Proxel GXL | < 3 g/l |

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 consult a doctor. If exposed or concerned, get medical advice.

- **Inhalation:** Remove patient to fresh air. Lie down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. **Seek medical assistance immediately.**
- **Skin:** Remove contaminated clothing and footwear. Wash affected areas with soap and water for at least 15 minutes. Do not rub skin. Wash clothing and shoes before re-use. **Seek medical assistance if symptoms appear and persist.**
- **Eyes:** Remove any contact lenses and flush eyes with plenty of clean water or saline solution for at least 15 minutes holding eyelids. Seek medical assistance if symptoms appear and persist.

- **Ingestion:** Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting unless directed to by medical personnel. For advice, contact the National Poisons Centre. Loosen tight clothing such as a collar, tie, belt or waistband. **Seek medical assistance immediately.**

NOTE TO PHYSICIAN

Treat symptomatically and supportively. No specific antidote known.

MODE OF ACTION:

KIRON 500 SC is an insecticide and acaricide which kills larvae, nymphs and adults by contact and / or stomach action. It also shows some ovicidal action. Upon contact with light, or *in vivo*, diafenthiuron is converted to the corresponding carbodiimide, an inhibitor of mitochondrial respiration.

USE RESTRICTIONS

- **Toxic to bees:** Do not spray during periods of bee activity.
- Before application is made, notify beekeepers to move hives to a safe location with an untreated source of nectar.
- Do not apply **KIRON 500 SC** to any crop or situation not mentioned in this instruction leaflet.
- Only apply **KIRON 500 SC** using an accurate and safe application technique.
- Do not apply this product in combination or tank mixture with any other product or agricultural remedy which is not specifically listed on this label. Universal Crop Protection (Pty) Ltd accepts no responsibility for any negative effects experienced if the instructions on this label are not adhered to, unless a Villa Crop Protection (pty) Ltd representative was consulted beforehand.

RESISTANCE WARNING

For resistance management, **KIRON 500 SC** is a group code 12A insecticide. Any insect population may contain individuals naturally resistant to **KIRON 500 SC** and other group code 12A insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **KIRON 500 SC** or any other group code 12A insecticide.

To delay insecticide resistance:

- Avoid exclusive repeated use of insecticides from the same insecticide group code. Alternate, or tank mix with, registered products from different insecticide group codes.
- Integrate other control methods (chemical, cultural, biological) into insect control programmes.
- The choice of products to be used during one growing season should take the resistance strategy into consideration.

Since the occurrence of resistance cannot be forecast, users are advised to keep treated crops under close observation. If treatment is not effective following the use of **KIRON 500 SC** as recommended, a resistant population may be present. If a resistant population is positively identified, consideration should be given to prompt use of an insecticide with a different mode of action for which there is no record of resistance to the relevant pest. For specific information on resistance management, contact the registration holder of this product. Universal Crop Protection (Pty) Ltd cannot accept responsibility for any losses that may result from failure to control pests resistant to **KIRON 500 SC**.

DIRECTIONS FOR USE: Use only as directed.

Make use of a scouting system and economic threshold values to determine when to commence application of **KIRON 500 SC** for insect and mite control in Cotton and Tomatoes.

Compatibility:

- The compatibility of **KIRON 500 SC** with other products depends on the formulations of the respective products as well as the quality of the spray water to be used.
- As formulations change from time to time, it is recommended that a physical compatibility test be done prior to the tank mixture being made.
- Do not make tank mixtures with other agricultural remedies or foliar feed products without first ensuring that no crop damage or reduction in efficacy will result.
- When mixing **KIRON 500 SC** with other products, all **WARNINGS, PRECAUTIONS** and **DIRECTIONS OF USE** appearing on that particular label must be adhered to.

Mixing instructions:

- Half-fill the spray tank with suitable water.
- Add the required quantity of **KIRON 500 SC** to the water in the tank while agitating.
- Fill the spray tank to the desired volume with water while agitating.
- **Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank overnight. The spray mixture must be applied within a few hours of mixing.** Do not use brackish water.
- Ensure that agitation takes place for a few minutes prior to commencement of spraying after normal operational stops, e.g. lunch break.
- Application equipment must be thoroughly flushed out at the end of the spraying operation.

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.

KIRON 500 SC may be mixed with water of different pH values. **Do not use products to acidify the water.**

Ensure constant and thorough agitation during mixing and spray operations.

Avoid spraying during the heat of the day, if foliage is wet, or if rain is imminent.

Allow 24 hours to expire between a **KIRON 500 SC** application and overhead irrigation.

GROUND APPLICATION**Tractor sprayers with spray boom for cotton application:**

Add a spray volume of at least 150 litres per hectare. Dense-growing cotton will require higher spray volumes for improved coverage.

Tractor sprayers for tomato application:

Apply using different spray volumes depending on plant size and application method. Ensure thorough wetting of the plants. For plants up to 600 mm in height, use up to 500 litres of water per hectare. For plants taller than 600 mm, use up to 1500 litres water per hectare.

Mistblowers and low-volume spray applications for tomatoes:

Complete coverage of the plant is important. It is essential to apply the same volume of **KIRON 500 SC** per hectare as would be the case when high-volume spray equipment is used, notwithstanding the volume of water per hectare applied.

RECOMMENDATIONS

| Crop / Pest | Application Rate | Remarks |
|---|-------------------------|--|
| <u>Cotton</u> Spider mites (<i>Tetranychus</i> spp.) | 800 ml / ha | Apply 1 to 2 applications. |
| <u>Tomatoes</u> Red Spider Mite (<i>Tetranychus urticae</i>) | 80 ml / 100 l water | Start applications at a threshold of <1.5 mobiles per compound leaf. Apply 2 applications at 7 to 8-day intervals. |
| Whiteflies (<i>Trialeurodes vaporariorum</i> and <i>Bemisia tabaci</i>) | 60 ml / 100 l water | Apply 2 applications at 7-day intervals. Alternate with chemicals with a different mode of action to reduce resistance development. See "Resistance Management" notes. |

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