## **Plant Growth Regulator**



# **GINSTOP 540 SC**

Reg. No. L 10519 Act No. 36 of 1947

4: 24/1/2023 - Jan2023

A suspension concentrate defoliant and leaf regrowth suppressor to facilitate the harvesting of cotton.

#### **ACTIVE INGREDIENTS**

thidiazuron (phenylurea compound) 360 g/e diuron (urea compound) 180 g/e



#### WARNING

#### Hazard Statements:

May be harmful if swallowed.
May be harmful in contact with skin.
Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation.
Suspected of causing cancer.
May cause damage to organs
through prolonged or repeated
exposure.

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

#### Precautionary Statements:

Do not breathe dust, fume, gas, mist, vapours and spray. Avoid release into the environment. Get medical help if you feel unwell.



UN Number: 3082

Registration holder: VILLA CROP PROTECTION (PTY) LTD.
Co. Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630
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: (Hazcall24) +27 86 044 4411 (Client: Villa Crop Protection)

#### **GINSTOP 540 SC**

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Registration holder:

VILLA CROP PROTECTION (PTY) LTD.

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## **WARNINGS**

#### Withholding period:

Minimum time between the last application and harvest:	
Cotton seed	35 days

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- SPRAY DRIFT MAY HARM OR KILL NON-TARGET PLANTS. PREVENT SPRAY DRIFT FROM COMING INTO CONTACT WITH OTHER PLANTS IN NON-TARGET AREAS.
- Do not graze treated areas or feed cotton trash to livestock.
- Handle with care.
- Store in a cool, dry place under lock and key, away from food, feeds, seed, fertilizers and other agricultural remedies.
- Keep out of reach of children, animals and uninformed persons.
- Re-entry: Do not enter treated area until spray deposit has dried unless wearing protective clothing.
- <u>Aerial application:</u> Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas.
- In case of poisoning, call a doctor and make this label available 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 pests 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:

Obtain, read and follow all safety instructions before use.

Do not breathe dust, fume, gas, mist, vapours and spray.

Wash hands and face thoroughly after handling. Do not touch eyes.

Use only outdoors in a well-ventilated area.

Avoid release into the environment.

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

IF SWALLOWED: Get medical help.

IF ON SKIN: Wash with plenty of water and non-abrasive soap. Get medical help.

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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 exposed or concerned, get medical advice.			
Get medical help if you feel unwell.			
If skin irritation 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.			

- Wash contaminated clothing after use.
- Prevent contamination of food, eating utensils, feed and drinking water.

Dispose of content/container to suitable landfill in accordance with local regulations

- Do not eat, drink or smoke whilst mixing, applying the product or before washing hands and face or change of clothing.
- Prevent drift of spray mist onto other crops, grazing, rivers, dams and areas not under treatment or to nearby water sources.
- Do not allow the spray solution to dry in the application equipment. Immediately after application, flush
  and rinse equipment (mixing tanks, pumps, application tanks, drop arms, booms, nozzles and all related
  equipment) thoroughly with detergent and water. Repeat washing at least twice. Should any residue of
  GINSTOP 540 SC remain in the application equipment, it may be released during subsequent application
  of other products and cause damage to crops.
- Thoroughly 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 (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 (<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.

Relevant hazardous components		
Thidiazuron	360 g/ℓ	
Diuron	180 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. Immediately consult a doctor.
- Inhalation: Remove person from contaminated area to fresh air and assist if breathing is needed. Seek medical attention if irritation occurs.
- **Skin:** Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Obtain medical attention if irritation persists. Do not rub skin. Emergency personnel should wear gloves and avoid contamination.
- Eyes: Flush eyes with clean water for at least 15 to 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after five (5) minutes and continue rinsing. Seek medical attention.
- Ingestion: Do not induce vomiting. Seek medical attention or call a poison control centre for treatment advice. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water.

## **USE RESTRICTIONS**

- **DO NOT** allow drift to contaminate adjacent crops. A drift retardant, such as **Interlock**® can be added when spraying. Do not apply under calm temperature inversion conditions (refer to "**Aerial Application**" instructions below) or when the wind might carry droplets to non-target areas.
- **DO NOT** plant lettuce or carrots in cotton fields treated with **GINSTOP 540 SC** within the previous nine (9) months.
- **DO NOT** plant legumes, lucerne, other root crops or leafy vegetables in cotton fields treated with **GINSTOP 540 SC** within the previous two (2) months.

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• **DO NOT** plant small grains, sorghum or maize in cotton fields treated with **GINSTOP 540 SC** within the previous two (2) weeks.

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

#### Compatibility:

**GINSTOP 540 SC** is compatible with **Ethephon 480 SL** and the adjuvants **Link** and **INTERLOCK®** (L 10254 / W130875 / N-AR 1856).

### Mixing instructions:

- Shake container well before use.
- Half fill the spray tank with clean water and activate the agitation system. Add the required volume of GINSTOP 540 SC while mixing.
- Fill to the final volume with water while adding the required volume of Ethephon 480 SL to the spray
  tank
- Lastly add the Link and Interlock® to the spray tank just before the final volume for the spray tank is reached.
- · Maintain agitation in the spray tank while spraying.
- Do not allow spray mixture to stand over for any length of time e.g., overnight.

#### **Method of Application:**

Good coverage of the whole cotton plant is essential to obtain effective defoliation. Ensure complete coverage and uniform wetting of foliage.

## Post Spray Equipment Cleaning

Rinse the spray tank and all hoses with a 0.1% solution of either calcium chlorid, 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.

### Ground application:

Apply **GINSTOP 540 SC** by means of a calibrated boom and nozzles sprayer equipment that is in good working order. Apply in 300 litres water per hectare.

#### **Aerial Application:**

Aerial application of **GINSTOP 540 SC** may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of SANS Code 10118 (Aerial Application of Agricultural Pesticides). Ensure that the spray mixture is distributed evenly over the target area and that the loss of spray material during application is restricted to a minimum. It is therefore essential that the following criteria be met:

- Volume: A minimum spray mixture volume of at least 40 to 50 litres per hectare is recommended. As
  this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee
  efficacy, or be held responsible for any adverse effects if this product is applied aerially at a lower volume
  rate than recommended above.
- <u>Droplet coverage</u>: 35 to 45 droplets per cm<sup>2</sup> must be recovered at the target area.
- <u>Droplet size</u>: A droplet spectrum with a VMD of 300 to 350 micron is recommended. Limit the production of fine droplets less than 150 micron (high drift and evaporation potential) to a minimum.
- <u>Flying height</u>: Maintain the height of the spray boom at 3 to 4 metres above the target. Do not spray when aircraft dives, is in a climb or when banking.
- Use suitable <u>atomising equipment</u> that will produce the desired droplet size and coverage, but which will
  ensure the minimum loss of product. The spraying system must produce a droplet spectrum with the
  lowest possible Relative Span.
- Position all the atomisers within the inner 60 to 75 % of the wingspan to prevent droplets from entering the <u>wingtip vortices</u>.
- The difference in <u>temperature</u> between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8 °C.
- Stop spraying if the wind speed exceeds 15 km per hour.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- Spraying under temperature <u>inversion conditions</u> (spraying in or above the inversion layer) and/or <u>high humidity conditions</u> (relative humidity 80 % and above) may lead to the following:

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- reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage),
- damage to other sensitive crops and/or non-target areas through drifting of the suspended spray cloud away from the target field.
- Ensure that the aerial spray operator knows exactly which fields to spray.
- Obtain an assurance from the aerial spray operator that the above requirements will be met and that relevant data will be compiled in a logbook and kept for future reference.

#### **APPLICATION RATES**

Crop & Purpose	Dosage Rate:	
Cotton	Tractor ground or Aerial application:	Small scale Knapsack application:
Defoliation	150 to 250 mℓ / ha	5 to 8 mℓ / 10 ℓ water
and	PLUS	PLUS
suppressing	0.1% (100 mℓ / 100 ℓ water)	10 mℓ / 10 ℓ water
of leaf	Link	Link
regrowth	PLUS	PLUS
	250 m <i>l</i> /ha	8 mℓ / 10 ℓ water
	Interlock <sup>®</sup>	Interlock <sup>®</sup>
	Tractor ground or aerial application: 150 to 250 mℓ / ha GINSTOP 540 SC	Small scale knapsack application: 5 to 8 mℓ / 10 ℓ water GINSTOP 540 SC
	PLUS	PLUS
	2.0 to 3.0 ℓ / ha <b>Ethephon 480 SL</b>	65 to 100 mℓ / 10 ℓ water <b>Ethephon 480 SL</b>
	PLUS	PLUS
	0.1% <b>Link</b> (100 mℓ / 100 ℓ water)	10 mℓ / 10 ℓ water <b>Link</b>

#### Remarks

- Apply to actively growing plants (not to senescent plants) when 60 % of the bolls are open and
  when the youngest harvestable boll is physiologically mature (a boll is mature when it is too hard
  to be dented when squeezed between thumb and fingers, too hard to be sliced with a sharp knife
  and when the seed coat becomes light brown in colour).
- Ensure good coverage of all the leaves.
- Refer to the Ethephon 480 SL label for USE RESTICTIONS and DIRECTIONS FOR USE.
- Dosages and defoliation conditions:
  - Use the lower rate when conditions are optimum for defoliation and the higher rate under marginal conditions.
  - The following can serve as a guideline, but other factors influencing the physiological conditions of the plant, e.g., humidity, soil moisture, fertilization, etc. should also be considered.
  - Very dense foliage of the crop at time of application may adversely affect even coverage and may result in sub-optimal defoliation.

Condition	Dosage
Optimum conditions:	
Day temperatures = 25 to 35°C	150 mℓ / ha
Night temperatures = > 12°C	
Intermediate conditions:	
Day temperatures = 20 to 25°C	200 mℓ / ha
Night temperatures = > 12°C	
Marginal conditions:	
Day temperatures = < 20°C	250 mℓ / ha
Night temperatures = < 12°C	

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### **IMPORTANT NOTES**

- Active growth of the crop is required to obtain optimal results. In the case of stress factors, and wilting
  irrigate before application of GINSTOP 540 SC.
- **Temperature requirement:** Day temperatures above 20°C and night temperatures above 10°C, within 7 to 21 days following application, is required to obtain effective defoliation of cotton with **GINSTOP 540 SC**.
- Rain within 24 hours after application will adversely affect defoliation.
- In the case of actively growing plant and/or rainfall shortly after application, re-growth may occur, particularly when the lower rate was applied.
- Extreme climatic conditions e.g., very low or high temperatures at time of, or after application, may adversely affect defoliation.
- Reduced spray penetration, and thus reduces efficacy of the chemical, will be obtained with dense and/or irregular plant stands or dense weed growth, particularly when using lower rates and/or aerial application.

The following products mentioned in this label may be replaced with equivalent products listed below:

- LINK (L 8675) = DIRECT (L 8680) and
- ETHEPHON 480 SL (L 4776 / N-AR 0994 / W1301438) = ETHEPHON 480 SL (L 7511).

ETHEPHON 480 SL and DIRECT are registered products of VILLA CROP PROTECTION (PTY) LTD.

LINK and ETHEPHON 480 SL are registered products of UNIVERSAL CROP PROTECTION (PTY)

INTERLOCK® and PROTANK® LIQUID CLEANER are registered trademarks of WINFIELD SOLUTIONS REGISTRATION HOLDINGS (PTY) LTD.

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