



## Plant Growth Regulator

# ALERT 520 SL

Reg. No. L 9719 Act No. 36 of 1947

N-AR 1565

[2: 24/11/2022 – Jan2023]

A soluble concentrate plant growth regulator for use in crops as indicated.

### ACTIVE INGREDIENT

cyanamide 520 g/l

REFER TO DETAILS AS PRINTED ON CONTAINER / BAG



**DANGER**

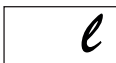
#### Hazard Statements:

Harmful if swallowed.  
Harmful in contact with skin.  
Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.  
Causes serious eye damage.  
Harmful if inhaled.  
Suspected of causing cancer.  
Suspected of damaging fertility or unborn child.

May cause damage to organs (thyroid) through prolonged or repeated exposure.  
Harmful to aquatic life with long lasting effects.

#### Precautionary Statements:

Obtain, read and follow all safety instructions before use.  
Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.



**villa**

UN Number: 1760

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](http://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)

DIRECTIONS FOR USE ENCLOSED

Batch Number:

Date of Manufacture:

**ALERT 520 SL**

Reg. No. L 9719 Act No. 36 of 1947

**ACTIVE INGREDIENT:**

cyanamide ..... 520 g/l

Registration holder:

**VILLA CROP PROTECTION (PTY) LTD**

Co. Reg. No.: 1992/002474/07

PO Box 801, KEMPTON PARK, 1620

Tel. (011) 396 2233

**WARNINGS****Hazard statements:**

Harmful if swallowed.
Harmful in contact with skin.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Causes serious eye damage.
Harmful if inhaled.
Suspected of causing cancer.
Suspected of damaging fertility or unborn child.
May cause damage to organs (thyroid) through prolonged or repeated exposure.
Harmful to aquatic life with long lasting effects.

- Handle with care.
- Toxic to bees and dangerous to fish and wildlife.
- Store under lock and key in cool (below 20 °C), dry, well-ventilated place, away from food, feeds, seed and fertilizers.
- **ALERT 520 SL is only stable for a period of one (1) year.**
- Keep out of reach of children, uninformed persons and animals.
- Re-entry: Do not enter treated area within one (1) day after treatment unless wearing protective clothing.
- **In case of poisoning, take the patient immediately to 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, 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 fumes, sprays, vapours or mists.
Wash hands and face thoroughly after handling. Do not touch eyes.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.
Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
IF SWALLOWED, INHALED, ON SKIN OR IN EYES: Get medical help.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN: Take off immediately all contaminated clothing. 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.
IF exposed or concerned, get medical advice.
Get medical help if you feel unwell.
If skin irritation or rash occurs: Get medical help.
Take off contaminated clothing and wash it before reuse.
Store locked up.
Dispose of content/container in accordance with local regulations.

- Avoid eye and skin contact.
- **Do not drink any form of alcohol 24 hours before, during and up to 24 hours after the spraying of this product, since alcohol interacts with Cyanamide, thereby increasing potential harmful effects.**
- Prevent drift onto other crops, grazing, rivers, dams or areas not under treatment or to nearby water sources.
- Thoroughly clean spraying equipment directly after use and dispose of wash water where it will not contaminate food, grazing, boreholes, rivers or dams.
- **TRIPLE RINSE** empty containers in the following manner: 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.
- Destroy the empty container by perforation and flattening and dispose of it in a safe way.
- **Never** re-use the empty container for any other purpose.
- Prevent contamination of food, feed, drinking water and eating utensils.
- **Do not** apply **ALERT 520 SL** where there is bee activity in orchards to be sprayed.

Relevant hazardous components	
Cyanamide	520 g/l
Phosphoric acid	< 50 g/l

### **SYMPTOMS OF HUMAN POISONING**

- Ingestion or inhalation: Pronounced dilation of the cutaneous vessels to the face and upper thorax, resulting in intense flushing and blue-red discolouration (especially when in combination with alcohol consumption).  
In severe cases giddiness, headache, respiratory distress, elevated pulse rate, tightness in the chest and a sensation of coldness in the extremities may occur. Hoarseness and cough are probably the result of a local irritant effect on the mucous membranes. These symptoms usually disappear within a short time but may last up to 24 hours.
- Skin contact: Reddening and blistering of the skin or in distinct effects with papulovesicular reaction or severe dermatitis.

### **FIRST AID TREATMENT**

- In case poisoning is suspected: Remove the patient from the source of poisoning to a well-ventilated area and keep him/her calm and at rest. Avoid contact with the skin, eyes and clothing. Remove contaminated clothing. If difficulties occur, obtain medical attention. Show container, label and/or safety data sheet to physician. Keep airway open to maintain breathing, especially if person is unconscious or has vomited. Do not apply direct mouth-to-mouth respiration.
- Skin contact: Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. **Seek medical attention.**
- Eye contact: **Flush eyes with clean water for at least 15 to 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing.** Seek medical attention.
- Inhalation: **Remove person from contaminated area to fresh air and assist breathing as needed.** Seek medical attention if irritation occurs.

- **Ingestion:** Take patient immediately to nearest physician and make the label available to him/her. 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.**

#### **NOTE TO PHYSICIAN**

**IMPORTANT: Cyanamide is NOT Cyanide and DOES NOT degrade to Cyanide.**

No specific antidote known. Apply symptomatic supporting therapy. Put the patient in a horizontal position while administering oxygen (6 litres per minute). **Product interacts with alcohol!** If ingested, the stomach should be emptied under qualified medical supervision. Monitor circulatory status.

#### **USE RESTRICTIONS**

- Only use prior to budding.
- Do not apply within four (4) hours prior to rain, or shortly after rain, while plants are still wet.
- Do not apply **ALERT 520 SL** plus mineral oil, **Link** or **Masterlock®** close to or prior to an expected cold spell (within five (5) days), as it may give poor results.
- **Inconsistent results may occur on trees suffering from stress conditions such as temporary water logging at time of treatment.**
- **MASTERLOCK® CAN IN CERTAIN INSTANCES REPLACE AN OIL OR SURFACTANT APPLICATION. PLEASE CONSULT THE REGISTRATION HOLDER AND/OR A VILLA CP REPRESENTATIVE, BEFORE ANY APPLICATION OR MIXTURE OF THIS PRODUCT IS APPLIED.**

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

#### **Compatibility:**

- **ALERT 520 SL** is compatible with **Link** or **Masterlock®**.
- **DO NOT** use **Masterlock®** with other surfactants or oil adjuvants.
- Do not mix with insecticides or fungicides at 1.5 % or higher dosage rates.
- **ALERT 520 SL**, at the reduced rate of 0.5 to 1.0 %, combined with a mineral oil or **Masterlock®**, (refer to list at end of label), can be used as a tank mixture for the control of Pernicious scale and Mealy bug on apples, pears, plums and apricots.
- The compatibility of **ALERT 520 SL** 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. In the case of uncertainty, contact the supplier or the registration holder.
- When **ALERT 520 SL** is used in conjunction with any other agricultural remedy, all **WARNINGS, PRECAUTIONS** and **DIRECTIONS FOR USE** mentioned on that label, must be adhered to.

#### **Mixing instructions:**

- Half fill the spray tank with clean water.
- Measure the required quantity of **ALERT 520 SL** and pre-mix with at least 10 litres of water. Add this mixture to the water in the spray tank, while agitating the mixture.
- Fill the spray tank with water to the required level, while maintaining agitation, to ensure thorough mixing.
- Maintain agitation during application.
- Prepared spray mixture must not be left in the spray tank for any length of time, e.g., overnight.
- Mixing sequence: If **ALERT 520 SL** is to be applied in a tank mixture with other products, follow the following mixing sequence for different types of formulations:
  - water dispersible granules to the spray tank first followed by other formulations (where applicable) in the following order:
    - wettable powders
    - suspension concentrates
    - water soluble concentrates
    - oil-based suspension concentrates
    - emulsifiable concentrates
    - adjuvants, surfactants and spray oils
    - drift retardants (e.g., **Masterlock®**).

### **Application instructions**

- **General - Berries, Vines, Kiwi Fruit and Young Non-bearing Fruit Trees:**  
Apply as a directed spray. Complete coverage of the buds is essential where rest breaking is sought. Use a handgun or knapsack sprayer equipped with D4 nozzles and 45 whirl plates (or equivalent). Spray at low pressure ( $\square$  100 kPa).
- Ensure that complete coverage of the buds is obtained where rest breaking is the objective.
- The application of **ALERT 520 SL** by brushes or sponges is not registered and is most strongly discouraged. **Manual application increases the risk of skin contamination, which may lead to severe skin burns.**
- Apply with a correctly calibrated sprayer that is in good working condition, to ensure that the correct dosage is evenly distributed over the target area.
- The lower the concentration of **ALERT 520 SL** applied; the more important thorough coverage of the dormant buds becomes. In case of waxy plant surfaces, the addition of a non-ionic wetter (**Link** or **Masterlock®**), as recommended, is essential. The type of trellis and the frame of the vines determine the volume of spray mixture required. Directed application with hand lances may improve efficacy and cost effectiveness.
- **Apples, Pears, Apricots and Plums (bearing trees):**
  - The volume of water required must be calculated according to the *Tree-Row-Volume* (TRV) formula:

$$\text{Litres per hectare} = \frac{\text{Tree height} \times \text{Tree diameter}^* \times 937}{\text{Row width}}$$

(\* - The TRV calculation is the maximum high-water volume (HVR) required when the trees are in full leaf. Use the water volume required per hectare to calculate the amount of product required per hectare according to the various growth stages of a tree during the season.)

- In the case of apples and pears, use not less than 70 % of the HVR volume, but also not less than 1000 litres per hectare.
  - In the case of stone fruit, use not less than 60 % of the HVR volume, but also not less than 750 litres per hectare.
  - Where the calculated volume is less than 1000 litres per hectare in the case of apples and pears, and less than 750 litres per hectare in the case of stone fruit, rather use hand lances.
  - Apply at least 66 % of the applied volume to the top half of the trees.
- **Application timing**  
The time when budding and full bloom occurs in deciduous fruit trees differ from year to year. It is therefore not possible to correctly predict full bloom dates for a specific season. In order to obtain a better indication regarding the decision on the time of application, also take into consideration the orchard's historical data, seasonal conditions (accumulation of cold units, flowering dates of early crops/cultivars, etc.) and physiological development of the crop and trees involved. It is recommended to consult an expert regarding a decision of the date of application.
  - **Specific crop instructions**
    - **Apples:**  
The application of **ALERT 520 SL** or **ALERT 520 SL** plus mineral oil may advance and shorten the flowering period, which may affect cross-pollination and following chemical thinning. Consult experts in this regard and adjust thinning programme accordingly.
    - **Sultanas - advanced bud-break:**  
The **ALERT 520 SL** dosage rate required may differ yearly from area to area. It may also be influenced by factors such as cumulative cold units during the period May to July for a particular area, growth vigour, stress factors, pruning time, etc. Under optimum conditions, successful enhancement could be obtained with a 3 % concentration. Most of the time higher concentrations of up to 5 % will result in more even bud burst. Thorough coverage of the buds is essential. The earlier the spraying the higher the requirements, as well as giving more uneven results. Most of the time the 5 % concentration will result in more constant and even results. Young and vigorous vines will also require higher **ALERT 520 SL** dosage rates.
    - **Table and Wine Grapes - even bud-break:**  
Dosage rates required to improve even bud-break differ between cultivars. Conditions - cumulative cold units during May to July, physiological condition of the vines, time of pruning, etc. - will be

determining factors. Consult experts in this regard. Young and vigorous vines will also require the higher **ALERT 520 SL** dosage rates.

- **Even bud-break of Berries:**

Dosage rates required to improve even bud-break differ between cultivars. Conditions - cumulative cold units during May to July, physiological condition of the vines, time of pruning, etc. - will be determining factors. Consult experts in this regard.

- **Plums:**

The application of **ALERT 520 SL** or **ALERT 520 SL** plus mineral oil may advance and shorten the flowering period which may affect cross-pollination especially, where the flowering period coincides with adverse weather conditions.

### **APPLICATION RATES**

**IMPORTANT:** Refer to “USE RESTRICTIONS” and “Application instructions” (especially crop related instructions) above.

<b>Crop</b>	<b>Dosage Rate</b>	<b>Remarks</b>
<b>Table and Wine grapes</b> Even bud-break	3.0 to 5,0 ℓ / 100 ℓ water  <b>PLUS</b>  0.05 % <b>Link</b>  <b>OR</b>  100 ml / 100 ℓ water <b>Masterlock®</b>	Apply 3 to 4 weeks prior to normal bud-break in 750 to 1000 litres water per hectare. Water volumes under 1000 litres per hectare <b>MUST</b> be used in conjunction with <b>Masterlock®</b> , whereas water volumes in excess of 1000 litres per hectare can be used in conjunction with <b>Link</b> . If the lower water volume is used, it is of utmost importance that thorough coverage of dormant buds is obtained.  <b>Refer below to list of cultivars that may be treated. Enquire about cultivars not on the list.</b>
<b>Sultanas</b> Advancement of bud-break	3.0 to 5,0 ℓ / 100 ℓ water  <b>PLUS</b>  0.05 % <b>Link</b>	Apply approximately 7 to 6 weeks before normal bud-break in 750 to 1000 litres water per hectare. Only consider <b>ALERT 520 SL</b> for advancement of bud-break in areas where frost or sudden cold snaps will not damage the new growth or flower bunches. <b>IMPORTANT</b> Inconsistent results may be obtained when <b>ALERT 520 SL</b> is applied too early, the dosage rate is too low regarding the specific conditions or insufficient coverage of the buds was obtained. <b>NOTE</b> In case of waxy plant surfaces, the addition of a non-ionic wetter ( <b>Link</b> or <b>Masterlock®</b> ), as recommended is essential for all treatments of grapevines.
<b>Kiwi Fruit</b>	5.0 ℓ / 100 ℓ water	Apply after pruning 4 to 5 weeks prior to normal budbreak.

<b>Crop</b>	<b>Dosage Rate</b>	<b>Remarks</b>
<b>Apples</b> Non-bearing trees (1 to 3 years old)	4.0 ℓ / 100 ℓ water	<b>Refer below to list of cultivars that may be treated. Enquire about cultivars not on the list.</b> Apply from 1 to 10 September or 4 to 5 weeks prior to expected bud break. Do not apply to trees which already show signs of bud-break, rather use the <b>ALERT 520 SL</b> plus mineral oil concentration as for bearing trees. <b>NOTE</b> Some cultivars may be sensitive to the higher rates of <b>ALERT 520 SL</b> . When in doubt, rather use the <b>ALERT 520 SL</b> plus mineral oil as for bearing trees.
Bearing trees	0.5 to 1.0 ℓ / 100 ℓ water  <b>PLUS</b> mineral oil* 2.0 to 4.0 ℓ / 100 ℓ water	<b>Refer below to list of cultivars that may be treated. Enquire about cultivars not on the list.</b> Apply about 4 to 6 weeks prior to expected full bloom, but also consider the conditions of the current year and physiological development of the flower buds. For seasons or areas that experienced abnormally low chilling units, rather wait with application until first signs of bud swell on spurs or flower buds are noticed. Use the higher rate of <b>ALERT 520 SL</b> and/or mineral oil where difficult bud-break conditions are expected (e.g., Golden Delicious growing against northern slopes, or when insufficient cumulative cold units were registered for the specific year).
<b>Pears</b> Non-bearing trees	1.0 ℓ / 100 ℓ water  <b>PLUS</b> mineral oil* 2.0 to 4.0 ℓ / 100 ℓ water	<b>Refer below to list of cultivars that may be treated. Enquire about cultivars not on the list.</b>  Apply about 2 to 4 weeks prior to expected bud break or during the period 20 to 30 August.
Bearing trees:	0.5 ℓ / 100 ℓ water  <b>PLUS</b> mineral oil* 2.0 to 4.0 ℓ / 100 ℓ water	Apply about 4 to 6 weeks prior to expected full bloom, but also consider the conditions of the current year and physiological development of the flower buds. For seasons or areas that experienced abnormally low chilling units, rather wait with application until first signs of bud swell on spurs or flower buds are noticed. Use the higher rates of mineral oil for cultivars with medium to high chilling requirements, or crops growing in warm areas or when insufficient cumulative cold units were registered for the specific year.
<b>Apricots</b> Bearing trees	0,5 ℓ / 100 ℓ water  <b>PLUS</b> mineral oil* 2.0 to 3.0 ℓ / 100 ℓ water	Apply about 4 to 6 weeks prior to expected full bloom, but also consider the conditions of the current year and physiological development of the flower buds. For seasons or areas that experienced abnormally low chilling units, rather wait with application until first signs of bud swell on spurs or flower buds are noticed. Use the higher mineral oil rates for cultivars with medium to high chilling requirements, or crops growing in warm areas or when insufficient cumulative cold units were registered for the specific year.

<b>Crop</b>	<b>Dosage Rate</b>	<b>Remarks</b>
<b>Plums</b> Non-bearing trees	-	Not recommended.
Bearing trees	0.5 ℓ / 100 ℓ water  <b>PLUS</b>  mineral oil* 2.0 to 4.0 ℓ / 100 ℓ water	Apply about 4 to 6 weeks prior to expected full bloom, but also consider the conditions of the current year and physiological development of the flower buds. For seasons or areas that experienced abnormally low chilling units, rather wait with application, until first signs of bud swell on spurs or flower buds are noticed. Where simultaneous flowering of cultivars for cross-pollination is required, rather spray 5 to 6 weeks before expected full bloom, but not later than first signs of bud swell on spurs or flower buds of the later cultivars, or 10 % balloon stage of early cultivars. Use the higher mineral oil rate on cultivars with medium to high chilling requirements or when insufficient cumulative cold units were registered for the specific year.
<b>Cherries</b> Bearing trees	4.0 ℓ / 100 ℓ water  <b>PLUS</b>  100 ml / 100 ℓ water <b>Masterlock®</b>	For increased and uniform budding, apply 4 to 6 weeks before expected blossom.  If possible, obtain expert advice.
<b>Berries</b> Blueberries (Brigitta & Elliott) & Raspberries (Tulameen)	3.0 to 5.0 ℓ water	Apply as full cover spray during bud swell.

\* Recommended mineral oils include **Ampron®** or **Citrole®** or **Budbreak®**.

<b>List of cultivars on which Cyanamide and/or Cyanamide + mineral oil has already been applied:</b>	
<b>Apples</b>	Pink Lady*, Granny Smith, Braeburn, Royal Gala, Golden Delicious, Top Red, Smoothee, Starking
<b>Apricots</b>	Bulida, Imperial (Pal Steyn) Peeka, Royal
<b>Grapes</b> Table grapes	Waltham Cross, Barlinka, Dan-Ben-Hannah, Alphonse Lavelle, Sultanina
Wine grapes	Muscat d' Alexandrie, Chenin Blanc, Colombar, Riesling (Cape), Cinsaut, Cabernet Sauvignon, Chardonnay, Shiraz, Sauvignon Blanc, Zinfandel, Weiser Riesling
<b>Pears</b>	Packham's Triumph, Bon Chretien, Doyenne du Comice, Beure Bosc, Flamingo, Rosemary
<b>Plums</b>	Simka, Songold, Casselman, Redgold, Eldorado, Santa Rosa, Reubenel, Gaviota, Leatitia
<b>Cherries</b>	Bing, Brooks, Royal Helen, Heidelfinger

The following product mentioned in this label may be replaced with an equivalent product:

- **LINK** (L 8675) = **DIRECT** (L 8680).

**AMPRON®** is a registered trademark of **BP S.A. EDMS. BPK.**

**BUDBREAK®** is a trademark of **BASF S.A. (PTY) LTD.**



**CITROLE 100<sup>®</sup>** is a trademark of **TOTAL FINAELF**.

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

**LINK** is a registered product of **UNIVERSAL CROP PROTECTION (PTY) LTD**.

**MASTERLOCK<sup>®</sup>** is a registered trademark of **WINFIELD SOLUTIONS REGISTRATION HOLDINGS (PTY) LTD**.