

Read the label before opening the container.

For full particulars, see enclosed leaflet.

**KEEP OUT OF REACH OF CHILDREN AND ANIMALS**

# RIPEN-IT

South Africa Reg. No: L6261 Act No. 36 of 1947

**PLANT GROWTH REGULATOR**

A growth regulator for use on sugar cane, pineapples, macadamias, citrus and grapes

**ACTIVE INGREDIENT:**

Ethephon (ethylene generator).....480g/l

**Product Information: 072 678 8226  
In case of poisoning: 082 446 8946**

**HAZARD STATEMENTS**

- Harmful if swallowed.
- Toxic in contact with skin.
- Harmful if inhaled.
- Causes severe skin burns and eye damage.
- May cause cancer.
- Toxic to aquatic life with long lasting effects.

**PRECAUTIONARY STATEMENTS**

- Do not handle until all safety precautions have been read and understood.
- Avoid release into the environment.



**DANGER**



**Registration holder: RT Chemicals CC**

**Co. Reg. No: CK87/21925/23**

**44 Kerk Street, Lichtenburg NW, South-Africa**

**Tel: +27 87 231 7261 | Fax: +27 86 541 7948**

**Web: www.envirobiochem.co.za**

Expiry Date:

Batch No:

Date of Manufacture:

**UN No. 3265**

## **WARNINGS:**

### **• IMPORTANT - EXPORT CROPS**

IN THE CASE OF CROPS INTENDED FOR EXPORT, CONFIRM WITHOLDING PERIODS WITH THE RELEVANT EXPORTING ORGANISATION. IF THIS PRODUCT IS USED ACCORDING TO THE RECOMMENDATIONS ON THIS LABEL, THE LOCAL MRL VALUES WILL NOT EXCEED. HOWEVER, R.T. CHEMICALS C.C. CANNOT ACCEPT RESPONSIBILITY FOR EXPORTED CROPS EXCEEDING THE IMPORT TOLERANCE OF OTHER COUNTRIES.

- Harmful if swallowed.
- Toxic in contact with skin.
- Harmful if inhaled.
- Causes severe skin burns and eye damage.
- May cause cancer.
- Toxic to aquatic life with long lasting effects.
- Store away from food and feedstuffs.
- Re-entry: Do not enter treated area until spray deposit has dried unless wearing protective clothing.
- Keep out of reach of children, uninformed persons and animals.
- Aerial application: Notify all inhabitants in the area to be sprayed and issue the necessary warnings.

**Although this remedy has been extensively tested under a wide 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 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 instruction 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:**

- Do not handle until all safety precautions have been read and understood.
- Wash hands, forearms, and face thoroughly after handling
- Do not eat, drink, or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.
- Wear protective gloves/protective clothing/eye protection/face protection.
- IF exposed or concerned: Get medical advice/attention.
- Remove/Take off immediately all contaminated clothing.
- Wash contaminated clothing before reuse.
- Collect spillage.
- Store locked up.
- Prevent drift of spray mist onto other crops, grazing, rivers, dams or areas not under treatment.
- 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 container in the following manner: Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the empty container three times with a volume of water equal to a minimum of 10% of that of the container. Add the rinsings to the content of the spray tank. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.
- Prevent contamination of food, feeds, eating utensils and drinking water.

## **RELEVANT SUBSTANCES:**

Ethephon 40%

Phosphorous acid < 1%

Phosphoric acid < 1%

Hydrochloric acid < 1%

1,2 ethylene dichloride < 1%

## **FIRST AID TREATMENT:**

**INGESTION:** Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

**SKIN CONTACT:** (or hair): Take off immediately all contaminated clothing. Rinse skin with water and non-abrasive soap.

**INHALATION:** Remove person to fresh air and keep comfortable for breathing.

**EYE CONTACT:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Immediately call a POISON CENTRE.

## **AERIAL APPLICATION: (Sugar cane only)**

Aerial application of RIPEN-IT may only be done by a registered Aerial Application Operator using a correctly calibrated, registered aircraft according to the instructions of SANS 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 spray mixture volume of 30 to 35 litres/ha 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.
- **Droplet coverage:** 30 to 40 droplets per cm<sup>2</sup> must be recovered at the target area.
- **Droplet size:** A droplet spectrum with a VMD of 300 to 350 microns is recommended. Limit the production of fine droplets to less than 150 microns (high drift and evaporation potential) to a minimum.
- **Flying height:** Maintain the height of the spray boom at 3 to 4 meters above the target. Do not spray when aircraft dives, is in a climb or when banking.
- Use suitable atomising equipment 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 wingtip vortices.
- The difference in temperature between the wet and dry bulb thermometers, of a whirling hygrometer, should not exceed 8°C.
- Stop spraying if the wind speed exceeds 15km/h.
- Stop spraying under turbulent, unstable and dry conditions during the heat of the day.
- Spraying under temperature inversion conditions (spraying in or above the inversion layer) and/or high humidity conditions (relative humidity 80% and above) may lead to the following:
  - 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.

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

### **Mixing Instructions:**

If the spray water is alkaline, a buffer should be added before adding RIPEN-IT. Half fill the spray tank with clean water and start agitation. Add the required amount of RIPEN-IT, stir, and fill the tank to the required volume with water. Do not leave the mixture to stand overnight.

CROP	DOSAGE	REMARKS
<b>SUGAR CANE</b> To increase sucrose content	1.5ℓ in 30 - 50ℓ water/ha	<u>Aerial application</u> : Ensure thorough crop coverage. For maximum benefit apply only to actively growing sugar cane 6 - 12 weeks before harvest.
<b>PINEAPPLES</b> 1. Colouring of fruit	2 - 4ℓ in 500 - 1 000ℓ water/ha	<b>RIPEN-IT</b> may affect sugar concentration unless applied at or just after natural colour change. For maximum benefit concentrate spray on fruit only. For uniform colouring ensure a thorough and even coverage of fruit with spray solution.
2. To induce flowering Cayennes	1ℓ plus 50ℓ U.A.N. (32) in 2 500ℓ water/ha	Apply to plants when they are ready to be forced to flower.
Queens	125mℓ plus 1.5ℓ U.A.N. (32) in 100ℓ water	Apply to individual plants or suckers when they are ready to be forced to flower. Apply 20mℓ solution per individual plant or sucker.
<b>CITRUS</b> Colouring of selected varieties	1. 200mℓ/25ℓ water for Navels & Tomangos	Mix sufficient <b>RIPEN-IT</b> to treat a maximum of 25 ton fruit. <b>RIPEN-IT</b> will colour fruit that is already coloured on one side. Colouring will develop over a 7 day period from treatment.
A. Packhouse	2. 150mℓ/25ℓ water for Pomelos & Lemons	<b>NOTES:</b> 1. <b>RIPEN-IT</b> is not compatible with waxes, MCPA, imazail sulphate 750 soluble powder or over 2 000ppm thiabendazole. 2. Use clean water.
B. Pre-harvest treatment	1. 60mℓ/100ℓ water for Valencias	Use as a medium cover spray 2 to 3 weeks before harvest. Colouring must have started on one side of the fruit.
	2. 50mℓ/100ℓ water for Pomelos & Tomangos	Add calcium nitrate 0,5% and wetters at 1mℓ per 100ℓ water. Irrigate trees 4 to 5 days before and again 4 to 5 days after application to reduce leaf drop. If trees are in a poor condition, reduce <b>RIPEN-IT</b> concentration by 20%.
C. Post-harvest transport treatment	125mℓ/20ℓ water plus 5mℓ wetter for Navels, Pomelos & Lemons	Using knapsack, spray the fruit while being discharged into trailer. Ensure good coverage. Cover the fruit overnight with a sail and pack the following day. Fruit colouring improves over the next 7 days. To keep trailer rust to the minimum, wash trailers daily with clean water.
<b>MACADAMIAS</b> (Cultivar Beaumont only To promote abscission of nuts	208mℓ / 100ℓ water <b>PLUS</b> 0.1% Isotridecanol (alkylpolyethylene glycol ether) 918g/ℓ	Also refer to “ <b>NOTES</b> ” below. Apply from March to July on trees when the nuts are physiologically mature. <u>Mist blowers (e.g. Chima, Jacto Arbus, Nobili):</u> Apply 4-5 litres <b>RIPEN-IT</b> per hectare in 2 000 to 2 500ℓ water per hectare. <u>Handgun / Lance”:</u> Apply 4.5-5.2 litres <b>RIPEN-IT</b> per hectare in 3 000 - 3 500ℓ water per hectare. (Approximately 150mℓ per 100 litres of water) <b>Ensure thorough wetting of all nuts.</b>

**NOTES:**

- It is important to confirm nut maturity by means of an “in-field” and “Home / Lab test.”
- **In-field test:** Check the colour of the inside of husk which should be brown to dark brown.
- **Home / Lab test:** Take a sample of 100 nuts per cultivar, dehusk immediately, dry overnight in an oven / warming drawer at 90°C (dry for longer if necessary), hand crack the next morning and float the kernels in a jug of tap water. Crop is mature if >95% kernels float. Note that hybrids have a lower oil percentage than Integs therefore 95% floating will not always be reached.
- Apply approximately 2.5 to 4.0 litres spray mixture per tree for 5 - 6 year-old trees and 6 - 8 litres per tree for mature (8 - 10 year-old trees).

CROP	DOSAGE	REMARKS
<b>APPLES</b> Improved colour development (Starking types) and Enhancement of maturity (Starking types & Granny Smith)	75 - 85ml / 100ℓ water	<b>Only for the local market.</b> Application as a full cover spray should be performed 2- 3 weeks before anticipated harvest. Use the lower dosage rate if high temperature conditions occur whilst spraying.
<b>GRAPES</b> Colour improvement of Barlinka cultivar	50ml / 100ℓ water	<b>Only for Barlinka cultivar.</b> Apply at 5% colouring of berries. Harvest at the correct degree of maturity, according to the sugar / acid content.
Colour improvement of Flame and Crimson Seedless cultivars	40ml / 100ℓ water  <b>OR</b>  40ml / 100ℓ water <b>PLUS</b> 50 - 100g / 100ℓ water <b>S-Abcsic Acid</b>	<b>Flame and Crimson Seedless cultivars.</b> Apply at veraison and follow up 7 days later. Harvest at the correct degree of maturity, acording to the sugar / acid content. Climate conditions can play a signifiant role in colour development and the breakdown of the active ingredient <b>Ethephon</b> . Make sure you understand the conditions of the vineyard before it is treated. <b>Ensure that the MRL levels are lower that the intended target value before picking commences.</b>