

## WARNINGS

**Hazard Statements:** May be harmful if swallowed. Toxic in contact with skin. Causes severe skin burns and eye damage. Toxic to aquatic life with long lasting effects.

- Handle with care.
- Product is corrosive.

**Aerial Application Warning:** Notify all inhabitants of the immediate area to be sprayed and issue the necessary warnings. Do not spray over or allow drift to contaminate water or adjacent areas.

**Spray deposits** of **FARMAG ETHEPHON** may react with the acrylic plastic type windshields of spray aircraft when left for periods of longer than 1 hour before cleaning. These deposits form an opaque film or spots on the surface which cannot be removed by washing with water or any other cleaner. Windshields should be washed with water immediately after each tank load of **FARMAG ETHEPHON** has been applied. After applying at the end of each day the aircraft should be rinsed with clean water.

### DISCLAIMER:

Although this product has been tested on a representative sample of economically important plant varieties under a large variety of soil and climatic conditions, the registration holder does not warrant that this product will be effective and safe to the crop under all conditions because action and effect of the chemical is affected by factors such as abnormal soil, climatic and storage conditions, as well as by the method and accuracy of application. The registration holder furthermore does not accept responsibility for either crop damage or non-performance due to failure to follow the label instructions or to the occurrence of conditions which would not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

## PRECAUTIONS

### Precautionary Statements

**General:** If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use.

**Prevention:** Do not breathe vapours, spray. Wash hands, forearms and face thoroughly after handling. Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

**Response:** IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. IF ON SKIN (or hair):

Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison centre or doctor. IF exposed or concerned:

Call a poison centre or doctor. Specific treatment (see supplemental first aid instruction on this label). Take off immediately all contaminated clothing and wash it before reuse. Wash contaminated clothing before reuse. Collect spillage.

**Storage:** Store locked up.

**Disposal:** Dispose of contents and container to an approved waste disposal plant.

- Prevent contamination of food, feedstuffs, drinking water and eating utensils.
- Prevent spray drift to nearby crops as **FARMAG ETHEPHON** can affect plant growth and development.
- Avoid spray drifting onto grazing, rivers, dams and any areas not under treatment.
- Clean all equipment thoroughly after use and do not pollute the environment with wash water.
- **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 ([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 empty container and do not use for any other purpose.

## RELEVANT SUBSTANCES

NAME	PRODUCT IDENTIFIER
Ethephon TC	CAS-No.: 16672-87-0

FARM-AG

# ETHEPHON

Reg. No. / Nr L6059 Act No. 36 of 1947/ Wet Nr 36 van 1947



PGR

**READ THE LABEL AND ATTACHED PACKAGED LEAFLET BEFORE USE  
KEEP OUT OF REACH OF CHILDREN AND ANIMALS**

A soluble concentration for the use as a plant growth regulator on sugarcane, pineapples, apples, grapevines and macadamias.

'n Oplosbare konsentraat vir die gebruik as 'n plantgroeireguleerder op suikerriet, pynappels, appels, wingerde en makadamias.

**ACTIVE INGREDIENT/AKTIEWE BESTANDEEL:**

Ethephon .....480g/ℓ..... Etefon



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- IF IN EYES: Rinse cautiously with water for several minutes.
- IF exposed or concerned: Immediately call a poison centre or doctor.

Batch No:  
 D.O.M:  
 D.O.E:  
 Net Contents:  
 See reverse of packaging for details.

FOR FULL PARTICULARS SEE ATTACHED PAMPHLET.  
 VIR VOLLEDIGE BESONDERHEDE KYK AANGEHEGTE ETIKET.

**In case of poisoning, call the following number:  
Poison Information Helpline (24 hrs) 0861 555 777  
Disaster Management Number: Spill Tech 086 100 0366**

UN No. / VR Nr: 2922

 **REGISTRATION HOLDER/ REGISTRASIEHOUER**  
 Cedar Falls Properties 130 (Pty) Ltd  
 Reg. Nr.: Reg. 2006/031383/07  
 61 Marshall Drive, Old Mill Industrial Park,  
 Mount Edgecombe, South Africa, 4300  
 Tel: 031 003 3486



Scan for GHS and label details

**BARCODE**

100406

### MODE OF ACTION

Systemic plant growth regulator. Metabolised or decomposed to ethylene, the biologically active species. Ethylene is a natural plant hormone which affects growth processes.

### DIRECTIONS FOR USE

Use only as directed

### Mixing instructions

Add half of the required amount of water to the spray tank and start agitation. Add the required amount of **FARMAG ETHEPHON** and the remaining amount of water. Prepare only as much spray solution as can be used on the day of mixing. Do not allow spray solution to stand over night.

### Aerial application (Sugar cane)

It is important that **FARMAG ETHEPHON** be applied evenly over the target area and that loss of spray material be restricted to a minimum.

The following guidelines are given:

(i) Use a conventional boom and nozzles equipped with flat fan tips. A minimum spray volume of 30 ℓ/ha must be applied and 25 to 30 droplets per sq. cm must be recovered on the target area. The CV for droplet distribution must not exceed 40%.

ii) The following flying heights above the target area should be maintained.

Wind speed (km/h)	Flying height (m)
0 - 8	3
9 - 15	2
> 15	do not spray

(iii) Do not spray during the heat of the day. The difference between the wet and dry bulk readings as determined by a whirling hygrometer should not exceed 8 °C.

(iv) Ensure that fields are accurately marked and that the pilot knows exactly which fields are to be sprayed.

(v) Obtain an assurance from the aerial spray operator that the above requirements will be met.

### APPLICATION RATES

Crop and use	Dosage	Remarks
<b>Sugar cane:</b> To increase sucrose content	1.5 ℓ in 30 to 50 ℓ water/ha	Ensure thorough and even crop coverage by means of aerial application. To obtain optimum results apply to actively growing cane 6 to 12 weeks prior to anticipated harvest.
<b>Pineapples:</b> Fruit colouring	2.0-4.0 ℓ in 500-1000 ℓ spray solution per ha	<b>FARMAG ETHEPHON</b> must be applied at or just after natural colour change. The spray solution should be directed at the fruit ensuring good overall coverage.
<b>Flower induction</b> (Cayennes)	33 mL/100 ℓ water plus 1.6 ℓ U.A.N. (32) in 3000ℓ water per ha.	Apply to plants when they are ready to be forced to flower.
<b>Flower induction</b> (Queens)	125 mL/100 ℓ water plus 1.5 ℓ U.A.N. (32) in 3000 ℓ	Apply 20 mL solution to individual plants or suckers when ready to be forced to flower water per ha.

Crop and use	Dosage	Remarks
<b>APPLES</b> For improvement of colour development (Starking types) and enhancement of maturity (Starking types & Granny Smith)	75-85 mL/100 L water (350-400 ppm active)	Apply as a full cover spray 2-3 weeks before expected harvest. Use lower concentration when temperatures are high during application.
<b>GRAPEVINES</b> <b>Barlinka cultivar ONLY</b> Berry colour enhancement	50 mL/100 L water	Apply as a full cover spray at 5% colouring of berries. Harvest at correct degrees of maturity/sugar:acid ratio.
<b>MACADAMIAS</b> <b>Beaumont cultivars ONLY</b> Abscission of mature nut in husk	156-208 mL/100 L water (750-1000 ppm active)	<p>Application time will depend on season and production area, but it is usually between the beginning of March and mid-July. Maturity testing is required.</p> <p>Apply only once the crop is mature. Application to trees with nuts of varying maturity may result in abscission of immature nuts.</p> <p>Ensure thorough coverage, with specific attention to those parts of the trees carrying the crop – it is essential that the nuts receive full coverage.</p> <p>For applications with mist blowers, use the lower rate late in the harvest period and the higher rate earlier in the harvest period.</p> <p>For applications with hand lances use only the lower rate at all times. Application during cold weather may result in a significant decline in efficacy.</p> <p>Avoid application during and after floral initiation.</p> <p>Do not apply to sick or stressed trees.</p> <p>Should be applied with a suitable, registered wetter.  <b>Do NOT apply by aerial application.</b></p>



## WAARSKUWINGS

**Gevaarstellings:** Kan skadelik wees indien ingesluk. Giftig in kontak met die vel. Veroorsaak ernstige velbrandwonde en oogskade. Giftig vir waterlewe met langdurige effekte.

- Hanteer versigtig.
- Produk is korroderend.

**Lugbespuiting:** - Stel alle inwoners in die onmiddellike omgewing van al die lande wat bespuit word, in kennis met die nodige waarskuwings. Moenie oor wateroppervlaktes spuit nie en tref voorsorg dat die spuitnewel nie water of aangrensende gebiede besoedel nie.

**Spuitafsaksel** van **FARMAG ETHEPHON** mag reageer op die akriliese plastiese tipe windskerms of spuitvliegtuig, wanneer dit gelos word vir periodes langer as een uur voor dit skoongemaak word. Hierdie afsaksels vorm 'n dun lagie of kolle op die oppervlak wat nie afgewas kan word met water of enige ander skoonmaakmiddel nie. Windskerms behoort gewas te word onmiddellik na elke tenkvrug van **FARMAG ETHEPHON** toegedien is. Aan die einde van elke dag se toediening behoort die vliegtuig met skoon water gewas te word.

Alhoewel hierdie produk getoets is op 'n verteenwoordigende monster van ekonomies belangrike plantsoorte onder 'n groot verskeidenheid van grond en klimaatstoestande, kan die registrasiehouer nie waarborg dat die produk effektief sal wees en veilig vir die gewas sal wees onder alle omstandighede, want aksie en gevolg van die chemiese produk word beïnvloed deur faktore soos abnormale grond, klimaat en bergingstoestande, sowel as die metode van toepassing en die akkuraatheid daarvan. Die registrasiehouer aanvaar verdermeer ook nie verantwoordelikheid vir nog gewas beskadiging nog geen prestasie as gevolg van gebrek aan toepassing van die etiketinstruksies of die voorkoms van toestande wat nie voorsien kon word tydens registrasie nie. Raadpleeg die verskaffer in geval van enige onsekerheid.

## VOORSORGMAATREËLS

### Voorsorgstellings

**Algemeen:** Indien mediese advies benodig word, hou produkhouer of etiket byderhand. Hou buite bereik van kinders. Lees etiket voor gebruik.

**Voorkoming:** Moet nie dampe, sproei inasem nie. Was hande, voorarms en gesig deeglik na hantering. Vermyn vrylating na die omgewing. Dra beskermende handskoene/beskermende klere/oogbeskerming/gesigbeskerming.

**Reaksie:** INDIEN INGESLUK: spoel mond uit. MOET NIE braking veroorsaak nie. INDIEN OP DIE VEL: Was met baie seep en water. INDIEN OP DIE VEL (of hare): Trek onmiddellik alle gekontamineerde klere uit. Spoel vel uit met water/stort. INDIEN IN OË: Spoel versigtig uit met water vir 'n paar minute. Verwyder kontaklense, indien teenwoordig en maklik om te doen. Gaan voort met spoel. Bel dadelik 'n gifsentrum of dokter. INDIEN blootgestel of bekommerd: Bel 'n gifsentrum of dokter. Spesifieke behandeling (sien aanvullende noodhulpinstruksies op hierdie etiket). Trek onmiddellik alle gekontamineerde klere uit en was dit voor hergebruik. Was gekontamineerde klere voor hergebruik. Versamel gemors.

**Berging:** Stoor toegesluit.

**Wegdoening:** Gooi inhoud en houer weg na 'n goedgekeurde afvalverwyderingsaanleg.

- Vermyn besoedeling van voedsel, voerstowwe, drinkwater en eetgerei.
- Vermyn spuitdryf te naby aan gewasse, want **FARMAG ETHEPHON** kan die plantgroeï en ontwikkeling beïnvloed.
- Vermyn spuitdryf op weivelde, riviere, damme en ander areas wat nie onder behandeling is nie.
- Maak alle toerusting deeglik skoon na gebruik en moenie die omgewing besoedel met die waswater nie.
- **SPOEL die leë houer DRIEKEER UIT soos volg:** Keer die leë houer om oor die spuit- of mengtenk en dreineer vir ten minste 30 sekondes nadat die vloeitot drup verlangsam het. Spoel die leë houer daarna drie keer agtereenvolgens uit met een kwart van die houervolume vars water en gooi die spelwater in die spuit- of mengtenk. Prik die drievoudig uitgespoelde houer deur en gooi weg via 'n goedgekeurde versamelaar of herwinner ([www.croplife.co.za](http://www.croplife.co.za)). Mot enie die houer begrawe, verbrand of skenk aan enige ander partye wat dit as 'n houer vir kos of drank kan gebruik nie.
- Vernietig leë houer en moet vir geen ander doel gebruik nie.

## RELEVANTE STOWWE:

NAAM	PRODUK IDENTIFISEERDER
Ethephon TS	CAS-No.: 16672-87-0

## WYSE VAN AKSIE:

Sistemiese plantgroeireguleerder. Gemetaboliseer of ontbind tot etileen, die biologies aktiewe spesie. Etileen is 'n natuurlike planthormoon wat groeiprosesse beïnvloed.

## GEBRUIKSAANWYSINGS

Gebruik slegs soos aangedui

### Menginstruksies

Voeg die helfte van die voorgeskrewe hoeveelheid water in die spuittenk en begin roer. Voeg die verlangde hoeveelheid **FARMAG ETHEPHON** en die verlangde hoeveelheid water by. Berei slegs die hoeveelheid spuitoplossing voor wat op die dag waarop dit gemeng word, gespuut kan word. Moenie spuitoplossing oornag laat staan nie.

### Lugbespuiting (Suikerriet)

Dit is belangrik dat **FARMAG ETHEPHON** eweredig oor die geteikende area toegedien word en dat die verlies van spuitstof tot die minimum beperk word.

Die volgende riglyne word gegee:

(i) Gebruik 'n konvensionele spuittoerusting met 'n spuitstuk toegerus met plat waaier tipe spuitstukke. Die minimum spuitvolume van 30 ℓ/ha moet toegedien word en 25 to 30 druppels per sq. cm moet oor die teikenarea herwin word. Die CV vir druppel verspreiding mag nie 40% oorskry nie.

ii) Die volgende vlieghoogtes bokant die teikenarea behoort gehandhaaf te word.

Windspoed (km/h)	Vlieghoogte (m)
0 - 8	3
9 - 15	2
> 15	moenie spuit nie

(iii) Moenie gedurende die hitte van die dag spuit nie. Die verskil tussen die nat en droë bol lesings soos bepaal deur 'n draaiende higrometer behoort nie 8 °C oorskry nie.

(iv) Verseker dat die veld akkuraat gemerk is en dat die loods presies weet watter veld gespuut moet word.

(v) Verky versekering van die lugbespuitingsoperateur dat daar aan die vereistes voldoen word.

## TOEDIENINGS DOSISSE

Gewas en gebruik	Dosage	Remarks
<b>Suikerriet:</b> Om die rietsuiker inhoud te verhoog	1.5 ℓ in 30 to 50 ℓ water/ha	Verseker deeglike en eweredige gewasbedekking deur middel van lugbespuiting. Om die beste resultate te verkry, moet dit toegedien word tot aktief groeiende suikerriet van 6-12 weke voor die verwagte oes.
<b>Pynappels:</b> Vrug verkleuring	2.0-4.0 ℓ in 500-1000 ℓ spuitoplossing per ha	<b>FARMAG ETHEPHON</b> moet toegedien word tydens of net na die natuurlike verandering van kleur. Die spuitoplossing behoort toegedien te word op die vrug om goeie algehele bedekking te verseker.
<b>Blom induksie</b> (Cayennes)	33 ml/100 ℓ water plus 1.6 ℓ U.A.N. (32) in 3000 ℓ water per ha.	Dien toe op plante wanneer hulle gereed is om te begin blom.
<b>Blom induksie</b> (Queens)	125 ml/100 ℓ water plus 1.5 ℓ U.A.N. (32) in 3000 ℓ water per ha	Dien 20 ml oplossing toe op individuele plante of spruite wanneer hulle gereed is om te begin blom.

Gewas en gebruik	Dosage	Remarks
<b>APPELS</b> Vir beter kleurontwikkeling (Starking tipes) en vervroeging van rypwording (Starking tipes en Granny Smith)	75 - 85 ml (350 - 400 dpm aktief)	Dien toe as 'n voldekbepuiting 2 - 3 weke vóór verwagte plukdatum. Gebruik die laer konsentrasie wanneer temperature hoog is tydens toediening.
<b>DRUIWE:</b> <b>Slegs barlinka</b> <b>Kultivar</b> Korrel kleurverbetering	50 ml/100 l water	Dien toe as 'n voldekbepuiting by 5% verkleuring van korrels. Oes teen die korrekte rypheidsgraad volgens suiker / suurinhoud.
<b>MAKADAMIAS</b> <b>Slegs beaumont</b> <b>Kultivar</b> Afspening van volwasse neut in huls	156 tot 208 ml /100 l water (750 dpm tot 1 000 dpm aktief)	<p>Die tyd van toediening hang af van die seisoen en produksiegebied, maar sal gewoonlik tussen die begin van Maart en middel Julie wees – die bepaling van volwassenheidsgraad is belangrik.</p> <p>Dien toe slegs wanneer die gewas volwasse is. Toediening op bome met neute van verskillende volwassenheidsgrade kan daartoe lei dat onvolwasse neute voortydig val.</p> <p>Dien toe as 'n voldekbepuiting. Maak seker dat al die neute bespuit word.</p> <p>Vir toediening met newelblasers, gebruik die laer dosis laat in die oesperiode en die hoër dosis vroeër tydens die oesperiode.</p> <p>Vir toedienings met “hand-lance” (handstange) gebruik slegs die laer dosis.</p> <p>Toediening gedurende koue weer kan daartoe lei dat heelwat minder neute val.</p> <p>Moenie toedien gedurende óf na blominisiasie nie.</p> <p>Moenie toedien op bome wat siek is óf bome wat onder fisiologiese stremming verkeer nie.</p> <p>Die byvoeging van 'n benattingsmiddel word aanbeveel.  <b>Moet nooit van lugtoediening gebruik maak nie.</b></p>





FARMAG

# ETHEPHON

Reg. No. / Nr L6059 Act No. 36 of 1947/ Wet Nr 36 van 1947



PGR

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Toxic in contact with skin.  
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IF SWALLOWED: Rinse mouth.  
Do NOT induce vomiting.  
IF ON SKIN: Wash with plenty of soap and water. Take off immediately all contaminated clothing. Rinse skin with water.  
IF IN EYES: Rinse cautiously with water for several minutes.  
IF exposed or concerned: Immediately call a poison centre or doctor.

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Disaster Management Number: Spill Tech 086 100 0366**

UN No. / VR Nr: 2922

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Cedar Falls Properties 130 (Pty) Ltd  
Reg. Nr.: Reg. 2006/031383/07  
61 Marshall Drive, Old Mill Industrial Park,  
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Tel: 031 003 3486



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165(H) x 140(W) mm

**CYAN MAG YEL BLK**

100406