



SHARDA ETHEPHON 480 SL

Reg. No. L10516, Act No. 36 of 1947 | Reg. Nr. L10516, Wet Nr. 36 van 1947

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

'n Oplosbare konsentraat plantgroeireguleerder vir gebruik op gewasse soos aangedui

ACTIVE INGREDIENT:
ETHEPHON 480g/l

AKTIEWE BESTANDDEEL:
ETEFON 480g/l

Registration Holder / Registrasiehouer
Sharda International Africa (PTY) LTD
Reg. No./Reg. Nr. 2010/002268/07
P. O. Box/Posbus 82021, Southdale, 2135
Tel: 031-764 3011
Tel: 087-822 2397

BATCH NO. LOT NR.	
EXPIRY DATE VERVAL DATUM	

NET VOLUME /
NETTO VOLUME

20 l

UN No./VN Nr. 3264

ETHEPHON 480SL® is the registered trade mark of Sharda International Africa cc | ETHEPHON 480SL® is die geregistreerde handelsmerk van Sharda International Africa cc



**CAUTION
VERSIGTIG**



CAUTION / VERSIGTIG WARNINGS

Handle with care. Product is corrosive. Irritating to eyes and skin. Poisonous by swallowing, inhalation and skin contact. Keep out of reach of children, uninformed persons and animals. Store under lock and key, away from food and feedstuffs. AERIAL APPLICATION: 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.

- **Re-entry interval:** Do not enter treated field until the spray deposit has dried unless wearing protective clothing.
- **In case of poisoning call a doctor and show him/her this label.**

PRECAUTIONS

- Do not inhale fumes or spray mist. Wear protective clothing, eye protection, overall, rubber boots, gloves.
- In the case of accidental contact with eyes wash with clean water for at least 15 minutes, and get medical treatment. After use and in case of accidental skin contact, wash thoroughly with soap and water.
- Wash contaminated clothing. Do not eat, drink or smoke whilst mixing or applying or before washing hands and face and change of clothing.
- Prevent contamination of food, feedstuff, eating utensils and drinking water.
- Prevent drift of spray mist onto other crops, grazing, rivers, dams or areas not under treatment.
- Clean applicator thoroughly after use.
- Rinse 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 contents of the spray tank before destroying the container in the described manner.
- Destroy empty container by perforation and flattening and never use for any purpose.
- Handle with care.
- Product is corrosive.
- Irritating to eyes and skin.
- Poisonous by swallowing, inhalation and skin contact.
- Harmful if swallowed.
- **NON** Toxic to fish and harmful to other aquatic life.
- Store away from food and feed.
- Keep out of reach of children, uninformed persons and animals.
- **Re-entry:** Do not enter treated area until spray deposit has dried.

Aerial application:

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.

DIRECTIONS FOR USE: Use only as indicated.

Mixing Instructions:

If the spray water is alkaline, a buffer should be added before adding Ethephon 480 SL. Replace the container cap immediately after pouring the required quantity of **Ethephon 480 SL**. Half fill the spray tank with clean water; add the required quantity of **Ethephon 480SL** to the spray tank. Fill the spray tank to the required capacity. The spray mixture must be agitated during mixing and spraying. Do not allow the spray mix to stand without agitation. All label recommendations of tank mix products must be followed.

Spray Application:

All spray equipment must be clean and correctly calibrated. Ensure a spray volume that will give an even spray droplet distribution on the target plant surfaces.

Ground equipment: Spray 150 to 450 l per ha depending on crop growth stage. If it rains within 2 hours of application, it will be necessary to re-apply the product.

Aerial Application:

Aerial application of **Ethephon 480 SL** may only be done by a registered Aerial Application Operator using a correctly calibrated, registered aircraft according to the instructions of SABS 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 spray mixture volume of 30 to 40l 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.
- **Droplet coverage:** 25 to 35 droplets per cm² must be recovered on the target area.
- **Droplet size:** A droplet spectrum with a VMD of 280 to 300 microns is recommended. Limit the production of fine droplets of 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 metres 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 15 km/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.

Crop Recommendations:

Apply Ethephon 480 SL as a full cover spray before run off

CROP/ DISEASE	DOSAGE RATE	REMARKS
Apples Improved colour development (Starking types)	85 ml / 100 l water	Only for the local market. Application as a full cover spray should be performed 2 to 3 weeks before anticipated harvest.
Citrus Colouring of fruit of selected varieties.		
Pre-Harvest Valencias Pomelos and Tomangos	60 ml / 100l water 50ml/100l water	Use as medium cover spray 2-3 weeks before harvest. Colouring must have started on one side of the fruit.
Post-Harvest Pack house. (brush - on treatment) Navels and Tomangos	200 ml / 25l water	Mix sufficient product to treat a maximum of 25 ton fruit. ETHEPHON will colour fruit that is already coloured on one side. Colouring will develop over a 7 day period from treatment.
Pomelos and Lemons	150 ml / 25l water	Note - 1. ETHEPHON is not compatible with waxes, imazil sulphate 750 S.P. or over 2000 ppm TZB [thiabendazole]. 2. Use clean water.
Transport treatment Navels, grapefruit and lemons	125 ml / 20 water and 5 ml wetter	Using a knapsack, spray the fruit while being discharged into the trailer. Ensure good coverage. Cover the fruit overnight with a sail and pack the following day. Fruit colouring improves over the next seven days - To keep trailer rust to a minimum, wash trailer daily with clean water.
Pineapples Colouring of fruit	2.0 to 4.0 l / 500 to 1000 l water / ha	ETHEPHON 480 SL may affect sugar concentration. Colouring of fruit unless applied at or just after natural colour change. For uniform colouring, ensure a thorough coverage of fruit with the spray solution. For maximum benefit direct spray on fruit only.
Induce flowering: Cayenne's	1.0l Plus 50l U.A.N.(32) / 2500l water / ha	Apply to plants when they are ready to be forced to flower.
Queens	125ml Plus 50l U.A.N.(32) / 2500l water / ha	Use 20ml of mixture per individual plant or sucker. Apply to individual suckers when they are ready to be forced to flower
Grapes Barlinkas cultivar colour improvement	50 ml / 100 l water	Only for Barlinka cultivar. Apply at veraison and follow up 7 days later. Harvest at the correct degree of maturity, according to the sugar/ acid content.
Flame and Crimson Seedless cultivars Colour improvement of	40 ml / 100 l water OR 40 ml / 100 l water PLUS 50 to 100 g / 100 l water S-Abscisic Acid	Flame and Crimson Seedless cultivars. Apply at veraison and follow up 7 days later. Harvest at the correct degree of maturity, according to the sugar/acid content. Climate conditions can play a significant role in colour development and the breakdown of the active ingredient Ethephon. Make sure you understand the conditions of the vineyard before it is treated.
Peaches	20ml/100L water	2-3 week prior to harvest
Macadamias To promote abscission of nuts	208 ml / 100 l water PLUS Wetter	Apply from March to July on trees when the nuts are physiologically mature. Mist blowers (e.g. Cima, Jacto Arbus, Nobilii): Apply 4 to 5 litres ETHEPHON 480 SL per hectare in 2000 to 2500 litres water per hectare. Handgun/Lance: Apply 4.5 to 5.2 litres ETHEPHON 480 SL per hectare in 3000 to 3500 litres water per hectare. (Approximately 150 ml per 100 litres of water). Ensure thorough wetting of all nuts. Refer to notes below.

NOTES

Also refer to "NOTES" below.

Apply from March to July on trees when the nuts are physiologically mature. Mist blowers (e.g. Cima, Jacto Arbus, Nobilii): Apply 4 to 5 litres ETHEPHON 480 SL per hectare in 2000 to 2500 litres water per hectare. Handgun/Lance: Apply 4.5 to 5.2 litres ETHEPHON 480 SL per hectare in 3000 to 3500 litres water per hectare. (Approximately 150 ml per 100 litres of water). Ensure thorough wetting of all nuts.

- 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 nec essary), hand crack the next morning and float the kernels in a jug of tap water. Crop is mature if >95 % of kernels float. Note that hybrids have a lower oil percentage than Inters therefore 95 % floating will not always be reached.
- Apply approximately 2.5 to 4.0 litres spray mixture per tree for 5 to 6 year-old trees and 6 to 8 litres per tree for mature (8 to 10 year-old trees).

WAARSKUWINGS

- Skadelik indien ingesluk.
- Nie Giftig vir visse skadelik vir waterorganismes.
- Vermoë oog en vel kontak want dit mag oog en vel irritasie veroorsaak.
- Berg weg van voedsel en voer.
- Hou buite bereik van kinders, oningeligte persone en diere.
- **Herbetreding:** Moet nie die behandelde area betree alvorens die spuitneerslag nie droog is nie, tensy beskermende klerasie gedra word.
- **Lugtoediening:** Stel alle inwoners in die onmiddellike omgewing van die gebied wat bespuit gaan word in kennis en reik die nodige waarskuwings uit. Moet nie oor aangrensende gebiede of water spuit of toelaat dat spuitnewel dit besoedel nie.

VOORSORGMATREËLS

- Moenie eet, drink of rook tydens hantering van hierdie produk.
- Voorkom besoedeling van voedsel, voer, eetgerei en drinkwater.
- Dra handskoene en gesigskerm wanneer die konsentraat hanteer word.
- In die geval van oog kontak, spoel die oë met skoon water vir ten minste 15 minute uit.
- In die geval van toevallige velkontak was deeglik met seep en water.
- In die geval van besoedelde kiere, verwyder en was deeglik.
- Spoel die lê houer drie keer uit met 'n volume water gelykstaande aan 'n minimum van 10% van die houer. Gooi die spoelwater by die inhoud van die spuit tenk.
- Vernietig die lê houer deur gate daarin te maak en plat te slaan en moet vir geen ander doel gebruik nie.
- Vermoë kontak met die spuitnewel tydens bespuiting.
- Voorkom die oorwaai van spuitnewel na ander gewasse, weiding, riviere, damme of gebiede wat nie onder behandeling is nie.
- Maak die spuit apparaat deeglik skoon na gebruik en raak ontslae van uitspoelwater waar dit nie gewasse, weiding, riviere of damme sal besoedel nie.

GEBRUIKSAANWYSINGS: Gebruik slegs soos aanbeveel.

Menginstruksies:

Indien spuitwater alkalies is moet 'n buffer gebruik word voordat Ethephon 480 SL bygevoeg word. Die houer moet onmiddellik na die giet van die benodigde hoeveelheid **Ethephon 480SL** met die dop toegemaak word.

Maak die spuittenk met skoon water halfvol; voeg die benodigde hoeveelheid **Ethephon 480SL** by; maak die spuittenk tot by die gewenste volume vol.

Die spuitmengsel moet gedurende meng en bespuiting aanhoudend geroer word. Moet nie die spuitmengsel toelaat om sonder roering te staan nie.

Alle etiket aanbevelings van die tenkmengsel produkte moet nagekom word.

Spuittoediening:

Alle spuittoerusting moet skoon en korrek gekalibreer word.

Grondspuittoerusting:

Vol dekbespuiting tot voor punt van afloop.

Verseker dat die spuitvolume 'n egalige spuitdruppel verspreiding op die teiken plantoppervlakte sal gee.

Indien dit binne 2 uur na bespuiting reën, sal dit nodig wees om die bespuiting te herhaal.

Lugbespuiting:

Ethephon 480SL kan slegs deur 'n geregistreerde Lugbespuitingsoperateur met 'n korrek gekalibreerde, geregistreerde vliegtuig volgens die instruksies van SABS Kode 10118 (Aerial Application of Agricultural Pesticides) uit die lug bespuit word. Verseker dat die spuitmengsel eweredig oor die teikenarea versprei word, en die verlies aan spuitmengsel tydens toediening tot 'n minimum beperk word. Dit is daarom belangrik om aan die volgende vereistes te voldoen:

- **Volume:** 'n Spuitmengsel volume van 30 - 40 liter per ha word aanbeveel. Hierdie produk is nie teen 'n verlaagde volume getoets nie. Die registrasiehouer kan nie effektiwiteit waarborg, of verantwoordelik gehou word vir enige nadelige effekte indien hierdie produk teen 'n laer volume, as hierbo aanbeveel, toegedien word nie.
- **Druppel bedekking:** 25 tot 35 druppels per cm² moet op die teikenarea herwin word.
- **Druppelgrootte:** 'n Druppelspektrum met 'n VMD van 280 tot 300 mikrons word aanbeveel. Beperk die produksie van druppels kleiner as 150 mikrons (hoë drywing en verdampingspotensiaal) tot 'n minimum.
- **Vlieghoogte:** Handhaaf die hoogte van die spuitbalk bo die teiken op 3 tot 4 meter. Moet nie spuit wanneer die vliegtuig duik, uitklim of draai nie.
- Gebruik geskikte **atomiseringsapparaat** wat die vereiste druppelgrootte en bedekking sal produseer, maar die minste verlies van produk verseker. Die spuitstelsel moet 'n druppelspektrum met die kleinste moontlike Relatiewe Span produseer.
- Plaas al die atomiseerders in die binneste 60 tot 75 % van die vlerkspan om te verhoed dat druppels binne-in die **vlerkpuntvorteks** beweeg.
- Die verskil in **temperatuur** tussen die nat- en droëboltermometer van 'n swaaihigrometer, moet nie 8°C oorskry nie.
- Stop bespuiting indien die **windspoed** 15 km/uur oorskry.
- Stop bespuiting tydens **turbulente**, onstabiele en droë toestande gedurende die hitte van die dag.
- Bespuiting onder temperatuur **inversie toestande** (deur bo of binne die inversie laag te spuit) en/of **hoë lugvog toestande** (relatiewe humiditeit 80% en meer) mag tot volgende probleme aanleiding gee:
 - verlaagde effektiwiteit aangesien die druppels as 'n wolk in die lug bly hang en moontlik verdamp (onvoldoende bedekking op teiken).
 - skade aan nie-teiken gewasse of sensitiewe areas as gevolg van wegdrywing van die spuitwolk na nie-teiken area.
 - Verseker dat die Lugbespuitingsoperateur presies weet watter lande bespuit moet word.
 - Dit is noodsaaklik om 'n versekering van die Lugbespuitingsoperateur te verkry dat aan al die bogenoemde vereistes voldoen sal word en dat data van belang in 'n logboek saamgevat is vir toekomstige verwysing.

Gewasaanbevelings:

Dien **Ethephon 480SL** as 'n volle dekbespuiting toe tot voor punt van afloop. euring te verkry sorg dat die vrugte so egalig moontlik bedek word.

GEWAS/ SIEKTE	DOSIS	OPMERKINGS
Appels Verbeter kleurontwikkeling. (Starking tipes)	85 ml / 100 l water	Slegs vir plaaslike mark. Dien toe as voldekbespuiting 2 tot 3 weke voor verwagte oes.
Sitrus - Verkleuring van vrugte van geselekteerde kultivars		
Voor oes behandelings Valencias	60 ml / 100l water	Dien toe as 'n medium dekbespuiting 2-3 weke voor pluktyd. Verkleuring moet reeds op een kant van die vrug plaasgevind het.
Pomelos en Tomangos	50 ml / 100l water	Bespoei 4-5 dae voor en weer 4-5 dae na bespuiting om blaarval te verminder. Indien die bome nie in 'n goeie toestand is nie moet die Volcano Ethephon konsentrasie met 20% verlaag word
Pakhuis (borselbehandeling) Nawels en tomangos	200 ml / 25l water	Meng voldoende ETHEPHON om 'n maksimum van 25 ton vrugte te behandel. Volcano Ethephon sal vrugte verkleur wat alreeds verkleuring toon op een kant van die vrug. Verkleuring ontwikkel oor 'n tydperk van 7 dae na behandeling
Pomelo's en Suurlemoene	150 ml / 25l water	Nota-1. ETHEPHON is nie mengbaar met was, imasil sulphate 750 S.P.of meer as 2000 d.p.m. TBZ [tiabendazool] in die mengsel nie. 2. Gebruik met skoon water.
Na oes behandeling Nawels, pomelos en suurlemoene	125 ml / 20l water plus 5 m benatter	Met 'n rugsakspuit, bespuit vrugte tenwyl vrugte in die pluikwa gegooi word. Verseker deeglike bedekking. Bedek die vrugte oornag met 'n seil en verpak die volgende dag. Vrugkleur verbeter gedurende 7 dae na behandeling. - Plukwaens moet daagliks met water skoongemaak word om roesontwikkeling tot 'n minimum te beperk.
Pynappels Verkleuring van Vrugte	2,0-4,0 l in 500-1000 l water/ha	ETHEPHON mag die suikerinhoud beïnvloed tensy dit met of net na natuurlike kleur verandering toegedien word. Vir beste resultate moet bespuiting slegs op vrugte gerig word. Om 'n egalige verkleuring te verkry sorg dat die vrugte so egalig moontlik bedek word.
Bevordering van blomvorming Cayennes	1l + 50l U.A.N. (32) in 2500l water /ha of 1l + 80kg spuit ureum/ha	Behandel plante wanneer gereed vir forsering van blomvorming.
Queens	125ml + 1.5kg U.A.N (32)/ha. of 125ml +2.5kg spuit ureum	Dien 20ml mengsel / plant of suier wanneer gereed vir forsering van blomvorming. Dien 20ml mengsel / plant of suier wanneer gereed vir forsering van blomvorming.
Druiewe	50ml/100ml water	Dien toe met 5% bessieverkleurin
Perskes	20ml/100l water	2 - 3 weke voor verwagte oes
Macadamia Om neutval te bevorder	208 ml / 100 l water PLUS benatter	Dien toe vanaf Maart tot Julie op bome wanneer die neut fisiologies ryp is. Misblasers: dien 4 - 5l Ethephon 480 SL /ha toe in 2000 - 2500l water /ha. Handlans dien 4.5 -5.2 l Ethephon 480 SL / ha toe in 3000 - 3500 water/ ha. (Ongeveer 150 ml/100l water.) Sien notas:

Notas:

Toediening van Maart tot Julie wanneer vrugte fisiologies ryp is.

Misblasers (Mist Blowers). Dien 4 -5 liter SHARDA Ethephon 480 SL in 2000- 2500 liter water per hektaar toe.

Handspuite. Dien 4.5 - 5.2 liter SHARDA Ethephon 480 SL toe in 3000 = 3500 liter water per hektaar toe.

(Ongeveer 150 ml per 100l water)

Verseker dat alle neut deeglik benat word.

Dit is belangrik om die rypheid van die neut te toets m.b.v veld toets of tuis/laboratorium toets.

Veldtoets: bevestig dat die binne dop bruin tot donkerbruin is.

Tuis/Laboratorium toets: neem 'n monster van 100 neute, verwyder die omhulsel, droog oornag in oond by 90°C (droog langer indien nodig), kraak die neut die volgende oggend en plaas in houër kraanwater. Neute is ryp wanneer >95% van neute dryf, neem kennis dat variëteite met laer olie inhoud nie altyd 95% sal bereik nie.

Vir bome 5-6 jaar oud dien 2.5 - 4.0 l spuitmengsel/boom toe en 6-8 l mengsel vir bome 8-10 jaar ouderdom