

HARVEST BROMO 500

Reg. No. L 9473, Act No 36 of 1947.

Reg Nr L 9473, Wet Nr. 36 van 1947

An emulsifiable concentrate contact acaricide with a long residual activity for the control of certain mites in bananas, citrus, cotton, mangoes and grapes.

'n Emulgeerbare konsentraat kontak mytdoder met 'n lang nawerking vir die beheer van sekere myte in piesangs, sitrus, katoen, mango's en druiwe.

INSECTICIDE GROUP CODE

UN

INSEKDODERGROEP KODE

Active Ingredient:
Bromopropylate 500
(benziliic acid ester)

500g/ℓ

AktieweBestanddeel:
Bromopropilaat
(bensieusuurester)

Nett Volume

ℓ

Netto Volume

Batch No

Distributed by:
Harvest Chemicals

Registration Holder/Registrasiehouer

Harvest Crop Solutions (Pty) Ltd.

Reg.No. 2014/187205/07

25 Dan Pienaar Road, Kloof, 3610

Tel: +27 (0) 31 764 6315

Poison Helpline: 085 155 5777

Lot Nr

Date of
manufacture

Vervaardigings-
datum

HARVEST
CHEMICALS



CAUTION
VERSIGTIG



WARNINGS

Withholding period – Allow the following minimum number of days between last application and harvest or grazing of the crops as listed below:

Citrus, Cotton	10 days
Bananas	14 days
Table Grapes	21 days
Wine Grapes	56 days

Do not apply Bromopropylate 500 with other products in a tank mixture when applying to grape vines after berry formation.

Note: The above withholding periods will ensure that residues do not exceed the local MRLs. However, the import tolerances of other countries might be exceeded. If the crop to be treated with Bromopropylate 500 is intended for export, consult the relevant importer or exporting body prior to the use of this product.

- Harmful if swallowed.
- Irritating to eyes and skin.
- **FLAMMABLE:** Keep away from heat and flame.
- Do not store below 1°C.
- Toxic to fish and other aquatic organisms.
- Keep out of reach of children, uninformed persons and animals.
- Store in a cool place, away from food and feedstuffs.
- Re-entry: Do not enter the treated field until the spray deposit has dried unless wearing protective clothing.
- Aerial application: Notify all the inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings.

Although this acaricide 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 climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the pest against the remedy concerned 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 instructions 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 inhale pesticide fumes or spray mist.
- Do not allow the concentrate to come in contact with the skin and the concentrate or spray mist to come into contact with the eyes.
- Wear protective clothing when handling the concentrate (eye protection, rubber boots, gloves).
- In case of accidental contact with eyes, wash with clean water for at least 15 minutes.
- After use and in case of accidental skin contact, wash thoroughly with soap and water.
- Wash contaminated clothing after use.
- 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 spray mist drift onto other crops, grazing, rivers, dams or areas not under treatment.
- Clean the spray equipment after use. Dispose of the rinsate where it will not contaminate crops, grazing or any water body.
- Triple rinse the empty containers in the following manner: Invert the empty container over the spray tank or mixing tank and allow to drain for at least 30 seconds after the flow has slowed to a drip. Thereafter rinse the 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 prescribed manner.
- Destroy the empty container by perforation and flattening.
- Dispose of the empty container in accordance with local and national legislation and never re-use it for any other purpose.

RESISTANCE WARNING:

For resistance management Bromopropylate 500 is a benzilic acid ester insecticide. Any mite population may contain individuals naturally resistant to Bromopropylate 500 and other benzilic acid ester insecticides. The resistant individuals can eventually dominate the mite population if these insecticides are used repeatedly. Bromopropylate 500 or any other benzilic acid ester insecticide may not control these resistant insects.

To delay insecticide resistance:

- Avoid exclusive repeated use of insecticides from the same insecticide group code.
- Alternate or tank mix with products from different insecticide group codes.
- Integrate other control methods (chemical, cultural, biological) into insect control programmes.

For specific information on resistance management contact the registration holder of this product.

DIRECTIONS FOR USE

Use only as directed

COMPATIBILITY:

The compatibility of **Bromopropylate 500** with other products may be influenced by the formulation of the products involved as well as the quality of the spray water.

A physical compatibility test should always be carried out prior to the application of any tank mixture.

MIXING INSTRUCTIONS:

Replace the container cap after use.

Add the required quantity of **Bromopropylate 500** to the required volume of water in the spray tank.

Ensure thorough agitation of the mixture in the spray tank during mixing and spraying.

The spray equipment must be thoroughly flushed out with clean water after use.

APPLICATION:

Ensure that all application equipment is clean and correctly calibrated before use.

Ground Application:

Apply as a full cover spray of the target plants to point of run-off.

Aerial Application:

Bromopropylate 500 may only be applied by aircraft for the control of **bud mite in citrus**.

Aerial application may only be done by a registered aerial application operator using a registered and correctly calibrated aircraft according to the instructions of SANS 10118 (Aerial Application of Agricultural Remedies). It is important to 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 l 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:** 30 to 40 droplets per cm² must be recovered on the target area.
- **Droplet size:** A droplet spectrum with a VMD of 250 to 280 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 air craft dives, is in a climb or when banking.
- Use suitable atomizing equipment that will produce the desired droplet size and coverage, and will ensure the minimum loss of product. The spraying system must produce a droplet spectrum with the lowest possible relative span.

- Position all the atomizers 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. Do not spray in the heat of the day.
- 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 orchards 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/PEST	DOSAGE RATE	REMARKS
BANANAS Banana mite <i>(Tetranychus amicus)</i>	100 mℓ/100 ℓ water	Ground Application: Apply a full cover spray as soon as the mite infestation is noticed. If necessary, apply a follow-up application, 10 days later. Ensure thorough wetting of the bunches.
COTTON Red or Two-spotted spider mite <i>(Tetranychus urticae)</i>	200 mℓ/100 ℓ water	Ground Application: Apply as a full cover spray at the first signs of infestation. Repeat after 10 days if necessary.
MANGOES Bud mite <i>(Aceria mangiferae)</i>	30 mℓ/100 mℓ water	Ground application: Apply as a pre-blossom full cover spray.
CITRUS Bud Mite <i>(Aceria sheldoni)</i>	30 - 50 mℓ/100 ℓ water	Ground application: Apply as a medium volume full cover spray ensuring thorough wetting. Use 6 to 7 ℓ spray mixture per one metre tree height above the skirt or tree diameter. In the case of severe blossom malformation two applications should be made - the first during spring following petal fall and the second during the period February to April. Use the higher dosage rate for the first application. In the case of light to medium blossom malformation apply a single spray any time during the period February to April. In the case of a light infestation on Navels , the single spray treatment may be delayed until the crop is harvested.

CROP/PEST	DOSAGE RATE	REMARKS
	2,5 – 3,0 ℓ/ha	Aerial application: Apply in 30 ℓ water.
Red mite <i>(Panonychus citri)</i>	75 mℓ/100 ℓ water	Ground Application: Apply at the first indications of an infestation. Repeat if necessary.
Flat mite <i>(Brevipalpus californicus)</i>	30 mℓ/100 ℓ water	
Grey mite <i>(Calacarus citrifolii)</i>	30 mℓ/100 ℓ water	Apply two applications. Apply the first application just after petal fall. The second application can be applied 2 months after the first.
Silver mite <i>(Polyphagotarsonemus latus)</i>	30 mℓ/100 ℓ water	If russetting occurred the previous season, apply an application in spring.
GRAPES		Ground Application:
Bud mite <i>(Eriophyes vitis),</i> Bud damage, Leaf gall formation and Curly leaf	50 mℓ/100 ℓ water (125 – 750 mℓ /ha)	Apply two applications. Apply the first application after bud burst of the last eyes, when the longest shoots are 2 to 5 cm long. The second application can be applied 14 days after the first. Ensure thorough wetting of the vines, especially the cordon arms. Apply at least 500 mℓ spray mixture per vine. A third application is recommended for the control of leaf gall formation and curly leaf on susceptible cultivars. Apply up to mid-December, before the second growth cycle start.

WAARSKUWINGS

Onthoudingsperiode: Laat die volgende minimum aantal dae toe tussen laaste toediening en oes of weiding van die gewasse hieronder genoem:

Sitrus, Katoen	10 dae
Piesangs	14 dae
Tafeldruiwe	21 dae
Wyndruiwe	56 dae

Moet nie Bromopropylate 500 met ander produkte in 'n tenkmengsel op druiwe toedien na korrelvorming nie.

Nota: Die bogenoemde onthoudingsperiodes sal verseker dat die residue nie die lokale Maksimum Residue Vlakke sal oorskry nie. Alhoewel, die invoer toelaatbare vlakke van ander lande mag oorskry word. Indien die gewas wat met **Bromopropylate 500** behandel gaan word, bedoel is vir uitvoer raadpleeg eers die betrokke invoerder of uitvoerder alvorens die produk gebruik word.

- Skadelik indien ingesluk.
- Irriterend vir oë en vel.
- **VLAMBAAR:** Hou weg van hitte en oop vlamme..
- Moet nie onder 1°C berg nie.
- Giftig vir visse en ander waterlewendes organismes.
- Hou buite die bereik van kinders, oningeligte persone en diere.
- Stoor in 'n koel plek, weg van voedsel en voer.
- Herbetreding: Moenie 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 voorgename bespuitingsgebied in kennis en reik die nodige waarskuwings uit.

Alhoewel hierdie mytdoder omvattend onder 'n groot verskeidenheid toestande getoets is waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie aangesien die werking en effek daarvan beïnvloed kan word deur faktore soos abnormale grond-, klimaats-, en bergingtoestande; kwaliteit van verduunningswater, verenigbaarheid met ander stowwe wat nie op die etiket aangedui is nie, en die voorkoms van weerstand van die plaag teen die betrokke middel, sowel as die metode, tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei, die omgewing of vir nadelige effek op mens of dier, of vir 'n gebrek aan prestasie as gevolg van die versuim van die gebruiker om etiketaanwysings na te kom of as gevolg van die ontstaan van toestande wat nie kragtens die registrasie voorsien kon word nie. Raadpleeg die verskaffer in geval van enige onsekerheid.

VOORSORGMATREËLS:

- Vermoed inaseming van die plaagdoderdampe en spuitnewel. .
- Moet nie toelaat dat die konsentraat in aanraking met die vel en die konsentraat of spuitnewel in kontak met die oë kom nie.
- Dra beskermende klere (rubberstewels, handskoene en oogbeskerming) wanneer die konsentraat hanteer word.
- In geval van toevallige aanraking met oë, was met skoon water vir ten minste 15 minute.
- Na gebruik en in geval van toevallige velkontak was deeglik met seep en water.
- Was besoedelde klere na gebruik.
- Moenie eet, drink of rook tydens vermenging of toediening of voordat hande en gesig gewas en ander klere na gebruik aange trek is nie.
- Voorkom besoedeling van voedsel, voer, eetgerei en drinkwater.

- Voorkom die oorwaai van spuitnewel na ander gewasse, weiding, riviere, damme of gebiede wat nie onder behandeling is nie.
- Maak die spuitapparaat skoon na gebruik. Raak van die spoelwater ontslae waar dit nie gewasse, weiding of enige waterlig gaam sal besoedel nie.
- Spoel die leë houër driekeer uit soos volg: Keer die leë houër om oor die meng- of spuittenk en dreineer vir minstens 3 kondes nadat vloei tot 'n drup verminder het. Spoel die houër daarna driekeer uit met 'n volume water gelykstaande aan 'n minimum van 10% van die houër. Gooi die spoelwater by die inhoud van die spuittenk voordat die houër op die voorgeskrewe wyse vernietig word.
- Vernietig die leë houër deur gate daarin te maak en plat te slaan.
- Doen weg met die leë houër volgens lokale en nasionale wetgewing en moet vir geen ander doel hergebruik nie.

WEERSTANDSWAARSKUWING:

Bromopropylate 500 is 'n bensiel-suurester insekdoder. Enige populasie van myte mag individue insluit wat 'n natuurlike weerstand teen **Bromopropylate 500**, of enige ander bensiel-suurester mytdoder het. Indien hierdie insekdoders herhaaldelik aangewend word, kan die weerstandbiedende individue uiteindelik die myt populasie oorheers. Hierdie weerstandbiedende myte sal waarskynlik nie deur **Bromopropylate 500** of enige ander bensiel-suurester insekdoder beheer word nie.

Om weerstand teen insekdoders te vertraag:

- Verminder die eksklusiewe herhaaldelike gebruik van insekdoders met dieselfde groeppkode.
- Wissel af met, of gebruik tenkmengsels van produkte in verskillende insekdoder groeppodes.
- Integreer ander beheermaatreëls (chemies, verbouing, biologies) in die insekdoder programme.

Vir spesifieke inligting oor weerstandbestuur kontak die registrasiehouer van hierdie produk.

GEBRUIKSAANWYSINGS:

GEBRUIK SLEGS SOOS AANGEDUI

VERENIGBAARHEID:

Die verenigbaarheid van **Bromopropylate 500** met ander produkte kan beïnvloed word deur die formulering van die betrokke produk asook deur die kwaliteit van die spuitwater.

'n Fisiese verenigbaarheidstoets moet altyd uitgevoer word voordat die middel in 'n tenkmengsel gebruik word.

MENGINSTRUKSIES:

Plaas die houërprop terug na gebruik.

Voeg die benodigde hoeveelheid **Bromopropylate 500** by die verlangde volume water in die spuittenk.

Verseker deeglike roering van die mengsel in die spuittenk tydens meng en bespuiting.

Na gebruik moet die spuittoerusting deeglik met skoon water uitgespoel word.

TOEDIENING:

Verseker dat alle spuittoerusting skoon en korrek gekalibreer is voordat dit gebruik word.

Grondtoediening:

Dien toe as 'n volle dekbespuiting van die teiken plante tot die punt van afloat.

Lugtoediening:

Bromopropylate 500 kan slegs vir die beheer van knopmyt in sitrus deur middel van lugbespuiting toegedien word.

Lugtoediening mag slegs deur 'n geregistreerde lugbespuitingsoperateur met 'n geregistreerde en korrek gekalibreerde vliegtuig volgens die SANS 10118 instruksies (Lugtoediening van Landboumiddels) gedoen word. Dit is belangrik om te verseker dat die spuitmengsel eweredig oor die teiken area versprei word en dat die verlies aan spuitmengsel tydens toediening tot 'n minimum beperk word. Die volgende vereistes moet nagekom word:

- **Volume:** 'n Spuitmengsel volume van 30 ℓ per hektaar 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.
- **Druppelbedekking:** 30 tot 40 druppels per cm² moet op die teikenarea herwin word.
- **Druppelgrootte:** 'n Druppelspektrum met 'n VMD van 250 tot 280 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 vlieg tuig duik nie, 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 binnste 60 tot 75 % van die vlerkspan om te verhoed dat druppels binne-in die vlerk puntvorteks beweeg.
- Die verskil in temperatuur tussen die nat- en droëboltermometer van 'n swaaihygrometer, 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 boord 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.

TOEDIENINGSHOEVEELHEDE

GEWAS/PLAAG	DOSIS	OPMERKINGS
SITRUS Knopmyt <i>(Aceria sheldoni)</i>	30 - 50 mL/100 ℓ water	Grondtoediening: Dien toe as 'n medium volume, volle dekbespuiting en verseker deeglike benutting. Gebruik 'n spuitmengsel volume van 6 tot 7 ℓ per meter boomhoogte bo afranding of boomdeursnee. In die geval van ernstige bloeisel misvorming dien twee bespuitings toe. Die eerste gedurende die lente period na blomblaarval en die tweede gedurende die periode Februarie tot April. Gebruik die hoër dosis vir die eerste bespuiting. In die geval van lig tot matige bloeisel misvorming dien 'n enkele bespuiting gedurende die periode Februarie tot April. In die geval van 'n ligte aanval op Navels kan die enkele bespuiting vertraag word tot na oes.

GEWAS/PLAAG	DOSIS	OPMERKINGS
	2,5 – 3,0 l/ha	Lugtoediening: Dien toe in 30 l water.
Roomyt (<i>Panonychus citri</i>)	75 mL/100 l water	Grondtoediening: Dien toe wanneer die eerste tekens van infestasië opgemerk word. Herhaal indien nodig.
Platmyt (<i>Brevipalpus californicus</i>)	30 mL/100 l water	
Grysmyt (<i>Calacarus citrifolii</i>)	30 mL/100 l water	Dien twee toediënings toe. Dien die eerste toediening toe net na blomblaarval. Die tweede toediening kan 2 maande na die eerste toegedien word.
Silvermyt (<i>Polyphagotarsonemus latus</i>)	30 mL/100 l water	Indien skilverruwing die vorige seisoen voorgekom het, dien 'n toediening toe in die lente.
DRUIWE Knopmyt (<i>Eriophyes vitis</i>), Knopbeskadiging, Knoppiesblaar & Krublaar	50 mL/100 l water (125 – 750 mL /ha)	Grondtoediening: Dien twee toediënings toe. Dien die eerste toediening toe na knopbars van die laaste ogies, wanneer die langste lote 2 tot 5 cm lank is. Die tweede toediening kan 14 dae na die eerste toegedien word. Verseker deeglike benatting van die wingerde, veral die kordonarms. Dien ten minste 500 mL spuitmengsel per stok toe. 'n Derde toediening word aanbeveel vir die beheer van knoppiesblaar en krublaar op sensitiewe kultivars. Dien toe tot middle Desember, voor die tweede groeisisklus begin.
KATOEN Rooi- of Tweekolspinmyt (<i>Tetranychus urticae</i>)	200 mL/100 l water	Grondtoediening: Dien toe as 'n volle dekbespuiting sodra die eerste tekens van besmetting opgemerk word. Herhaal indien nodig na 10 dae.
MANGO'S Knopmyt (<i>Aceria mangiferae</i>)	30 mL/100 l water	Grondtoediening: Dien toe as 'n volle dekbespuiting voor blom.
PIESANGS Piesangmyt (<i>Tetranychus amicus</i>)	100 mL/100 l water	Grondtoediening: Dien 'n volle dekbespuiting toe sodra die myt infestasië opgemerk word. Indien nodig, dien 'n opvolgbespuiting toe, 10 dae later. Verseker deeglike benatting van die trosse.