# BITRAD ACEPHATE

Reg. No. L7013 (Act No. 36 of 1947)

Reg. Nr. L7013 (Wet Nr. 36 van 1947)

**A water soluble powder systemic and contact insecticide for the control of pests on crops as indicated.**

**’n Wateroplosbare poeier sistemiese en kontak insekdoder vir die beheer van plae op gewasse soos aangedui.**

**INSECTICIDE GROUP 1B INSEKDODER GROEP**

**ACTIVE INGREDIENT:** / **AKTIEWE BESTANDDEEL:**

Acephate (organo phosphate) ...................... 750 g/kg ............................... Asefaat (organo fosfaat)

**NET VOLUME 1kg NETTO VOLUME**

**GEREGISTREER DEUR:/**
**REGISTERED BY:**
BITRAD CONSULTING (PTY) LTD
Co. Reg. No. 2002/025636/07
PO Box 51454
Wierda Park, 0149

**DISTRIBUTED BY:/**
**VERSPREI DEUR:**

BATCH NUMBER / LOTNOMMER

DATE MANUFACTURED / DATUM VERVAARDIG

**CAUTION**
**VERSIGTIG**

201102

BITRAD ACEPHATE is a registered trademark/is 'n geregistreerde handelsmerk

**WARNINGS:**

THE FOLLOWING NUMBER OF DAYS MUST BE ALLOWED BETWEEN LAST APPLICATION AND HARVEST:

| | |
|---|---|
| Potatoes | 14 days |
| Apples and Pears | 30 days |
| Cruciferae | 3 days |
| Peaches | 28 days |
| Plums | 28 days |
| Tobacco | 14 days |
| Table- and Wine grapes | 40 days |
| Tomatoes | 3 days |

- Handle with care.
- Mild skin and moderate eye irritant.
- Toxic to fish, bees and wildlife.
- Store in a cool place away from food and feed.
- Keep out of reach of children and animals.

**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 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 dust or spray mist.
- Avoid contact with eyes and prolonged or repeated skin contact. Wear rubber gloves and face shield when handling powder.
- Wash with soap and water after use.
- Do not eat, drink or smoke whilst mixing, spraying or before washing hands and face.
- Avoid drift or spray onto other crops, grazing, rivers and dams.
- Clean applicator before using again and dispose of wash water where it will not contaminate crops, grazing, rivers and dams.
- Destroy empty container and do not re-use for any other purpose.
- Prevent contamination of food, feed, drinking water and ea ting utensils.

**RESISTANCE WARNING:**

**For resistance management ACEPHATE is group code 1B insecticide. Any insect population may contain individuals naturally resistant to ACEPHATE and other group code1B insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by ACEPHATE or any other group code 1B insecticide.**

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

**For specific information on resistance management contact the Distributor of this product.**

**DIRECTIONS FOR USE:**

**Use only as directed**

**MIXING INSTRUCTIONS:**
Half fill the spray tank with water and add the required amount of **BITRAD ACEPHATE**, while agitating. Ensure that all the lumps have dissolved before adding the rest of the water. Maintain agitation. Preferably agitation should be maintained during application of the remedy.

| CROP/PEST | DOSAGE | DIRECTIONS FOR APPLICATION |
|---|---|---|
| **POTATOES** | | |
| Aphids | 500 - 750 g/ha | Apply at first sign of infestation and repeat regularly.<br>Apply in 200 – 500 ℓ water/ha, depending on plant size.<br>Use higher dosage rate to ensure initial control. |
| Potato tuber moth | 500 g/ha | Apply as a full cover spray in 200 - 500 ℓ of water/ha, depending on plant size. Repeat at 8 - 14 day intervals if necessary. Ridge at least twice during the season. Will also control aphids. |
| **APPLES AND PEARS** | | |
| American bollworm<br>Codling moth<br>Fruit nibbler<br>Leaf roller<br>Banded fruit weevil<br>(Snout beetle) | 50 g/100 ℓ water<br>(HV: 1,25 - 1,75 kg/ha)<br>(LV: 1,0 - 1,4 kg/ha) | Apply at 75 % petal drop and repeat 14 days later. Do not apply more than two treatments per season. Will also control Antestia bug |
| Antestia bug | | Apply as a full cover spray as soon as pest is noticed. Repeat when required, but do not apply more than two treatments per season. Will also control American bollworm, weevil, fruit nibbler, codling moth and leaf rollers. |
| **CRUCIFERAE** | | |
| Diamond back moth larvae | 350 - 500 g/ha | Apply as a full cover spray when pest is noticed, paying special attention to the underside of leaves. Repeat every 7 - 10 days if required. If infestation is already present, use higher dosage rate for the first application. |
| **PEACHES** | | |
| American bollworm | 50 g/100 ℓ water<br>(HV: 1,25 - 1,75 kg/ha)<br>(LV: 1,0 - 1,4 kg/ha) | Western Cape only. Apply at 75 % petal fall and repeat 14 days later.<br>Do not apply more than two treatments per season. Will also control codling moth, antestia bug, fruit nibblers and weevil. |
| Codling moth<br>Antestia bug<br>Banded fruit weevil<br>(Snout beetle) | As for American bollworm | Western Cape only. Apply as a full cover spray and repeat if necessary. Do not apply more than two treatments per season. Will also control American bollworm and fruit nibblers. |
| Aphids | 25 g/100 ℓ water<br>(HV: 0,38 - 0,63 kg/ha) | Western Cape only. Apply as a full cover spray and repeat if necessary. Do not apply more than two treatments per season |

| | | |
|---|---|---|
| **PLUMS**<br>American bollworm<br>Antestia bug<br>Codling moth<br>Fruit nibbler<br>Leaf roller<br>Banded fruit weevil (Snout beetle) | 50 g/100 ℓ water<br>(HV: 1,25 - 1,75 kg/ha)<br>(LV: 1,0 - 1,4 kg/ha) | Western Cape only. Apply as a full cover spray when pests are noticed and repeat if necessary. Do not apply more than two treatments per season |
| **TOBACCO**<br>American bollworm | **Ground application:**<br>200 g/100 ℓ water | Apply as a full cover spray. Ensure thorough coverage of all leaves. Where a heavy infestation occurs a second application is recommended 7 days later. Repeat if necessary. |
| Leaf miner | **Ground application:**<br>200 g/100 ℓ water | Apply as a full cover spray. Ensure thorough coverage of all leaves. Where a heavy infestation occurs a second application is recommended 7 days later. Repeat if necessary |
| Slug | **Ground application:**<br>200 g/100 ℓ water | Apply as a full cover spray and repeat application every 7 days up to 14 days before harvest. When a heavy infestation occurs, apply 400 g BITRAD ACEPHATE/100 ℓ water as a full cover spray and re-apply 200 g BITRAD ACEPHATE/100 ℓ water 7 days later. |
| Cutworms | **Ground application:**<br>165 g/100 ℓ water | Pour 30 mℓ of the solution over each young plant. Repeat if necessary. |
| Green aphid (*Myzus persicae*) | **Ground application:**<br>200 g100 ℓ water | Apply as a full cover spray. Ensure thorough coverage of all leaves. Where a heavy infestation occurs a second application is recommended 7 days after the first application to obtain good initial control. Repeat application if necessary every 7 days. |
| Seed beds (Cutworm and leaf eating insects) | **Ground application:**<br>1 g/m$^2$ | **Spray:** Mix 200 g BITRAD ACEPHATE/100 ℓ water and use as coarse spray at the rate of 500 mℓ solution/m$^2$ to obtain a good run-off onto soil. Repeat every 7 days.<br>**Drench:** Mix 65 g BITRAD ACEPHATE/100 ℓ water and use a watering can to apply 1,5 litre solution/ m$^2$ every 7 days. |
| **TABLE- and WINE GRAPES**<br>Weevil (Snout beetle) | 50 - 75 g/100 ℓ water<br>(HV: 0,13 - 1,1 kg/ha) | Apply as a full cover spray in 250 - 1 500 ℓ spray mix/ha as soon as pest is noticed. Use the higher dosage rate in cases of severe infestation. Repeat 7 - 14 days later if necessary. |
| **TOMATOES**<br>American bollworm | 75 - 100 g/100 ℓ water | Wet plants thoroughly. Commence spraying at flowering and repeat at 7 - 14 day intervals for as long as pest remains active. Repeat application after rain. If infestation is already present use higher dosage rate. |
| Thrips | 100 g/100 ℓ water | Apply as a full cover spray and ensure thorough coverage of plants. Where a heavy infestation occurs a second application is recommended 7 - 10 days after the first. Repeat application every 7 - 10 days if necessary. |

**WAARSKUWINGS:**

DIE VOLGENDE AANTAL DAE MOET VERLOOP TUSSEN LAASTE TOEDIENING EN OES:

| | |
|---|---|
| Aartappels | 14 dae |
| Appels en Pere | 30 dae |
| Koolgewasse | 3 dae |
| Perskes | 28 dae |
| Pruime | 28 dae |
| Tabak | 14 dae |
| Tafel- and Wyndruiwe | 40 dae |
| Tamaties | 3 dae |

- Hanteer versigtig.
- Ligte vel en matige oog-irritant.
- Giftig vir visse, bye en wild.
- Stoor in koel plek weg van voedsel en voer.
- Hou buite bereik van kinders en diere.

**Alhoewel hierdie middel 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 klimaats- en bergingstoestande; kwaliteit van verdunningswater; 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 aangewasse, plantegroei, die omgewing of vir nadelige effek op mens of dier of vir 'n gebrek aan prestasie van die betrokke middel 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 die geval van enige onsekerheid.**

**VOORSORGMAATREËLS**

- Moet nie poeier of spuitmis inasem nie.
- Vermy kontak met oë en aanhoudende of herhaalde velkontak. Dra rubber handskoene en gesigskerm wanneer poeier hanteer word.
- Was met seep en water na gebruik.
- Moet nie eet, drink of rook terwyl produk gemeng en toegedien word en voordat hande en gesig gewas is nie.
- Verhoed wegdrywing van spuitnewel na ander gewasse, weiding, riviere en damme.
- Maak toerusting skoon en gooi waswater weg waar dit nie gewasse, weiding, riviere en damme sal besoedel nie.
- Vernietig leë houer en moet vir geen ander doel gebruik nie.
- Verhoed besmetting van voedsel, voer, drinkwater en eetgerei.

**WEERSTANDWAARSKUWING:**

**ACEPHATE is 'n groepkode 1B insekdoder. Enige populasie van 'n spesifieke insek mag individue insluit wat 'n natuurlike weerstand teen ACEPHATE, of enige ander groepkode 1B insekdoder het. Indien hierdie insekdoders herhaaldelik aangewend word, kan die weerstandbiedende individue uiteindelik die insekpopulasie oorheers. Hierdie weerstandbiedende insekte sal waarskynlik nie deur ACEPHATE of enige ander groepkode 1B insekdoder beheer word nie.**

Om weerstand teen insekdoders te vertraag:

- Vermy eklusiewe herhaaldelike gebruik van insekdoders met dieselfde groepkode. Wissel af met, of gebruik tenkmengsels van insekdoders uit ander groepkodes.
- Integreer ander beheermaatreëls (chemies, verbouing, biologies) in insekdoder programme.

**Vir spesifieke inligting oor weerstandbestuur, kontak die Verspreider van hierdie produk.**

**<u>GEBRUIKSAANWYSINGS</u>**
**Gebruik slegs soos aangedui.**

**<u>MENGINSTRUKSIES</u>**
Voeg die benodigde hoeveelheid **BITRAD ACEPHATE** by ‘n halfvol spuittenk, en roer tot alle klonte opgelos is. Maak seker dat al die klonte opgelos is voor res van water bygevoeg word. Voeg die res van die water by terwyl voortdurend geroer word. Dit word aanbeveel dat roering volgehou word tydens bespuiting.

| GEWAS/PLAAG | DOSIS | GEBRUIKSAANWYSINGS |
|---|---|---|
| **AARTAPPELS**<br>Plantluise | 500 - 750 g/ha | Dien toe in 200 - 500 ℓ water/ha, afhangende van plantgrootte. Begin toediening by eerste tekens van besmetting en herhaal gereeld. Die hoër dosis moet gebruik word om die aanvanklike besmetting te beheer. |
| Aartappelmot | 500 g/ha | Dien as ‘n volle dekbespuiting in 200 - 500 ℓ water/ha, afhangende van plantgrootte. Herhaal met 8 - 14 dae tussenposes indien nodig. Die aartappels moet ten minste 2 maal per seisoen opgeërd word. Sal ook plantluise beheer. |
| **APPELS EN PERE**<br>Amerikaanse bolwurm<br>Kodlingmot<br>Vrugtevreter<br>Bladroller<br>Gebande vrugtekalander (Snuitkewer) | 50 g/100 ℓ water<br>(HV: 1,25 - 1,75 kg/ha)<br>(LV: 1,0 - 1,4 kg/ha) | Dien toe teen 75 % blomblaarval. Herhaal 14 dae later. Moet nie meer as twee behandelings per seison toedien nie. Sal ook Antestia besie beheer. |
| Antestia besie | | Dien as ‘n volle dekbespuiting toe sodra plaag opgemerk word. Herhaal toediening soos nodig, maar moet nie meer as twee toedienings per seisoen toedien nie. Sal ook Amerikaanse bolwurm, Kalander, Vrugtevreters, Kodlingmot and Bladrollers beheer. |
| **KOOLGEWASSE**<br>Ruitrugmotlarwes | 350 - 500 g/ha | Dien as ‘n volle dekbespuiting toe sodra plaag opgemerk word. Dit is nodig om die onderkant van blare deeglik te benat. Herhaal toediening met 7 - 10 dae tussenposes, of soos nodig. Die hoër dosis moet by die eerste toediening gebruik word indien die larwes reeds teenwoordig is. |
| **PERSKES**<br>Amerikaanse bolwurm | 50 g/100 ℓ water<br>(HV: 1,25 - 1,75 kg/ha)<br>(LV: 1,0 - 1,4 kg/ha) | Slegs in die Wes-Kaap. Dien toe teen 75 % blomblaarval, herhaal 14 dae later. Moenie meer as twee behandelings per seisoen toedien nie. Sal ook Kodlingmot, Antestia besie, Vrugtevreters en Kalander beheer. |
| Kodlingmot<br>Antestia besie<br>Gebande vrugtekalander (Snuitkewer) | Soos vir Amerikaanse bolwurm | Slegs in die Wes-Kaap. Dien toe as ‘n volle dekbespuiting sodra die plaag opgemerk word, herhaal indien nodig. Moenie meer as twee behandelings per seisoen toedien nie. Sal ook die Amerikaanse bolwurm en Vrugtevreters beheer. |
| Plantluise | 25 g/100 ℓ water<br>(HV: 0,38 - 0,63 kg/ha) | Slegs in die Wes-Kaap. Dien toe as ‘n volle dekbespuiting sodra die plaag opgemerk word en herhaal indien nodig. Moenie meer as twee behandelings per seisoen toedien nie. |

| | | |
|---|---|---|
| **TABAK**<br>Amerikaanse bolwurm | **Grondtoediening:**<br>200 g/100 ℓ water | Volle dekbespuiting. Verseker deeglike benatting van alle blare. Indien swaar besmetting voorkom, word ‘n tweede toediening aanbeveel 7 dae later. Herhaal indien nodig. |
| Blaarmyner | **Grondtoediening:**<br>200 g/100 ℓ water | Volle dekbespuiting. Verseker deeglike benatting van alle blare. Indien swaar besmetting voorkom, word ‘n tweede toediening aanbeveel 7 dae later. Herhaal indien nodig. |
| Slak | **Grondtoediening:**<br>200 g/100 ℓ water | Dien toe as ‘n volle dekbespuiting en herhaal elke 7 tot 14 dae voor oes. Indien ‘n hoë besmetting voorkom, dien 400g BITRAD ACEPHATE/100 ℓ water as ‘n volle dekbespuiting toe en volg op met ‘n bespuiting van 200 g BITRAD ACEPHATE/100 ℓ water 7 dae later. |
| Snywurm | **Grondtoediening:**<br>165 g/100 ℓ water | Gooi 30 mℓ van die oplossing uit oor elke plant. Herhaal indien nodig. |
| Groen plantluis<br>(*Myzus persicae*) | **Grondtoediening:**<br>200 g/100 ℓ water | Dien toe as ‘n volle dekbespuiting en verseker deeglike benatting van al die blare. Wanneer ‘n hoë besmetting voorkom word ‘n tweede toediening 7 dae na die eerste aanbeveel om ‘n goeie aanvanklike beheer te verkry. Herhaal toediening elke 7 dae indien nodig. |
| Saadbeddings<br>(Snywurm en blaarvretende insekte) | **Grondtoediening:**<br>1 g/$m^2$ | **Bespuiting:** Meng 200 g BITRAD ACEPHATE/100 ℓ water en dien toe as ‘n growwe bespuiting teen 500mℓ oplossing/ $m^2$ om goeie afloop na grond te kry. Herhaal elke 7 dae.<br>**Inwassing:** Meng 65 g BITRAD ACEPHATE/100 ℓ water en dien toe met behulp van ‘n gieter teen 1,5 liter oplossing/ $m^2$ elke 7 dae. |
| **TAFEL- EN WYNDRUIWE**<br>Kalander (Snuitkewer) | 50 - 75 g/100 ℓ water<br>(HV: 0,13 - 1,1 kg/ha) | Dien as ‘n volle dekbespuiting toe in 250 - 1 500 ℓ spuitmengsel/ha sodra die plaag opgemerk word. Gebruik die hoër dosis indien die besmetting straf is. Herhaal 7 - 14 dae later indien nodig. |
| **TAMATIES**<br>Amerikaanse bolwurm | 75 - 100 g/100 ℓ water | Plante moet baie deeglik benat word. Die bespuitings moet tydens blom ‘n aanvang neem, en elke 7 - 14 dae herhaal word, vir solank die plaag aktief is. Herhaal bespuitings na reën. Die hoër dosis moet gebruik word indien plaag reeds voorkom |
| Blaaspootjies | 100 g/100 ℓ water | Dien toe as ‘n volle dekbespuiting en sorg dat plante deeglik benat word. Met ‘n hoë besmetting dien ‘n tweede bespuiting 7 - 10 dae na eerste toe. Herhaal elke 7 - 10 dae indien nodig. |