



BITRAD TERBUFOS 15 GR

Reg.No. L7123 Act No. 36 of 1947

Reg.Nr. L7123 Wet Nr. 36 van 1947

RESTRICTED USE AGRICULTURAL REMEDY
THIS REMEDY IS RESTRICTED DUE TO ACUTE TOXICITY. THIS REMEDY MAY ONLY BE SOLD TO AND USED BY A REGISTERED PEST CONTROL OPERATOR, OR BY SOMEONE UNDER THE SUPERVISION OF A REGISTERED PEST CONTROL OPERATOR, AND ONLY FOR THOSE USES COVERED BY THE PEST CONTROL OPERATOR'S SCOPE OF REGISTRATION, AND ONLY AS DIRECTED ON THIS LABEL.

BEPERKTE GEBRUIK VIR LANDBOUMIDDEL
HIERDIE MIDDEL IS BEPERK AS GEVOLG VAN AKUTE TOKSISITEIT. HIERDIE MIDDEL MAG SLEGS VERKOOP WORD AAN EN GEBRUIK WORD DEUR 'N GEREGISTREERDE PLAAGBEHEEROPERATEUR, OF DEUR IEMAND ONDER TOESIG VAN 'N GEREGISTREERDE PLAAGBEHEEROPERATEUR, EN SLEGS VIR DAARDIE GEBRUIKE WAT DEUR DIE PLAAGBEHEEROPERATEUR SE OMVANG VAN REGISTRASIE GEDEK WORD, EN SLEGS SOOS AANGEDUI OP HIERDIE ETIKET.

READ ATTACHED LABEL BEFORE USE
KEEP OUT OF REACH OF CHILDREN AND ANIMALS

LEES DIE INGESLOTE ETIKET VOOR GEBRUIK
HOU BUITE BEREIK VAN KINDERS EN DIERE

INSECTICIDE GROUP 1B

INSEKDODER GROEP 1B

A granular soil applied systemic and contact insecticide/nematicide for the control of pests as indicated.

'n Korrelagtige grondtoegediende plaagdoder vir die beheer van plae soos aangedui.



Hazard Statements:

Fatal if swallowed. Fatal in contact with skin. Very toxic to aquatic life. Very toxic to aquatic life with long term lasting effects.

Precautionary statements:

Do not get in eyes, on skin, or on clothing. Wash hands, face, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear PPE.

DANGER

ACTIVE INGREDIENT

Terbufos (organophosphate)

AKTIEWE BESTANDDEEL

Terbufos (organofosfaat)

.....150 g/kg.....

Net Massa

Netto Massa

Registered by/Geregistreer deur:
BITRAD CONSULTING (PTY) LTD

41 Rudolph Str, Sunderland Ridge, Centurion. Tel: 012 666 7331

BATCH NUMBER
DATE MANUFACTURED

LOTNOMMER
DATUM VERVAARDIG

Expiry date

< 2 years/jaar

Vervaldatum

UN No.
Emergency number

2757
082 446 8946

VN nr.
Noodnommer

National Poisons Centre: 0861 555 777

WARNINGS:

- **Hazard Statements**

Fatal if swallowed
Fatal in contact with skin
Fatal if inhaled
Very toxic to aquatic life
Very toxic to aquatic life with long lasting effects

- **PRE HARVEST INTERVALS: NUMBER OF DAYS WHICH MUST BE ALLOWED BETWEEN APPLICATION AND HARVEST:**
 Beans(dry), Maize.....60 days
 Potatoes, Groundnuts, Sunflower.....90 days
 Grain Sorghum.....80 days

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 soil, 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 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:

- **Prevention**

Do not handle until all safety precautions have been read and understood
Obtain, read and follow all safety precautions before use
Avoid breathing dust/fumes
Do not get in eyes, on skin or on clothing
Wash hands, face and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors in a well ventilated area
Avoid release to the environment
Wear protective gloves, -clothing, eye - and face protection
In case of inadequate ventilation, wear respiratory protection
Avoid contamination of food, feed, eating utensils, drinking water and water sources
PREVENT GRAZING OF TREATED CROPS AT ANY TIME

- **Response**

On poisoning -get emergency help immediately
Specific treatment required in case of poisoning - see "Note to Physician" on label
Rinse mouth
Collect spillage
If swallowed: Get emergency medical help immediately
If on skin: Wash with plenty of water
If inhaled: Remove person to fresh air and keep comfortable for breathing
Immediately remove all contaminated clothing and wash before re-use

- **Storage**

Store locked up
Store in well ventilated place. Keep container tightly closed

- **Disposal**

Dispose of contents or containers to an approved waste disposal facility
--

RELEVANT SUBSTANCES

Hazardous Component	Weight - %	GHS Classification
Terbufos	15	Acute Toxicity - Oral, Category 2. Acute Toxicity - Dermal, Category 1. Aquatic Toxicity - Acute, Category 1. Aquatic Toxicity - Chronic, Category 1. M Factor: 1000
Diethyl Glycol	<10	Acute Toxicity - Oral, Category 4. STOT. SE, Category 3. STOT. RE, Category 3.

FIRST AID TREATMENT:

- ALWAYS OBTAIN IMMEDIATE MEDICAL TREATMENT AND SHOW THIS LABEL TO PHYSICIAN.
- Refer to Responses under PRECAUTIONS..

NOTE TO PHYSICIAN:

Administer atropine sulphate, intravenously (1 - 4 mg) every 5 - 10 minutes until the first signs of atropinisation (dry flushed skin and tachycardia) occurs. 2-PAM at 50mg/kg up to a total dose of 1 - 2 g or $\frac{2}{3}$ of this dose Protopam. Repeat oximes if necessary. Do not give morphine.

MODE OF ACTION:

Bitrad Terbufos belongs to the organophosphate insecticide group which is classified under IRAC (Insecticide Resistance Action Committee) group code 1B with insecticidal action as acetylcholine esterase inhibitors.

RESISTANCE WARNING:

Any nematode/insect population may contain individuals naturally resistant to Terbufos and other group code 1B insecticides. The resistant individuals can eventually dominate the insect On nematode population if group 1B products are used repeatedly. These resistant nematodes/insects may not be controlled by Terbufos 15 GR or any other group code 1B insecticide.

- Avoid exclusive repeated use of products from the same insecticide group code. Alternate 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**

NOTE: See WARNINGS for the period that has to be allowed between last application and harvest.

APPLICATION GUIDELINES: Apply only at planting time and ensure that granules are covered with soil.

CROP/PEST	DOSAGE	DIRECTIONS FOR APPLICATION
MAIZE, SORGHUM, SUNFLOWERS, DRY BEANS, GROUNDNUTS. Black Maize Beetle	33 g/ 100 m Plant Furrow	Place the granules by means of a granule applicator directly in front of the planter press wheel in a band not broader than 5 cm. Cover the granules with soil by means of an iron bar dragged directly behind the planter. DO NOT ALLOW THE SEED TO COME INTO DIRECT CONTACT WITH THE GRANULES. Best results will be obtained if application is done in moist soil.
MAIZE, SUNFLOWERS, DRY BEANS and GROUNDNUTS. Nematodes, False Wireworm, <i>Astylus</i> larvae, Rootworm, Wireworm.	66 g/ 100 m Plant Furrow	

POTATOES
Black Maize Beetle

66 g/ 100 m Plant Furrow

The seed should be covered with at least 5 cm of soil before applying the granules. The granules should be applied in a band of approximately 15 cm. Black Maize Beetle will only be controlled for a limited period. Further control might be necessary by means of a suitable insecticide. Best results will be obtained if application is done in moist soil.

WAARSKUWINGS:

- **Gevaarklousules**

Dodelik indien ingesluk
Dodelik met velkontak
Dodelik indien ingeasem
Uiters giftig vir waterlewe
Uiters giftig vir waterlewe met langdurige gevolge

- WAGPERIODES VOOR OES: MINIMUM AANTAL DAE WAT MOET VERSTRYK TUSSEN TOEDIENING EN OES :

Droëbone, Mielies.....	60 dae
Aartappels, Grondbone, Sonneblomme.....	90 dae
Graan Sorghum.....	80 dae

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 grond- 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 aan gewasse, plantegroei, en omgewing of vir nadelige effek op mens of dier of vir 'n gebrek aan prestasie van die betrokke middel 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:

- **Voorkoming**

Moenie produk hanteer voor alle veiligheidsreëls gelees en verstaan is nie
Kry, lees en volg alle veiligheidsvoorsorg maatreëls voor gebruik
Voorkom inaseming van stof/dampe
Vermyn kontak met oë, vel en klere
Was hande, gesig en blootgestelde veldeeglik na hantering
Moet nie eet, drink of rook wanneer produk gebruik word nie
Gebruik slegs buitenshuis is goed deurligte aea
Voorkom vrystelling van produk aan die omgewing
Dre beskermende handskoene, -klere, oo -en gesigbeskerming
In geval van onvoldoende belugting, dra respirators.
Voorkom besoedeling van voedsel, eetgerei, drinkwater en waterbronne
VOORKOM BEWEIDING VAN BEHANDELDE GEWASSE TEN ALLE TYE

- **Reaksie**

Met vergiftiging -kry onmiddellike noodhulp
Spesifieke behandeling word verlang met vergiftiging - sien "Nota aan Geneesheer" op etiket en Seksie 4 van SDS
Spoel mond
Versamel gemorsde materiaal
Indien ingesluk: Kry onmiddelik mediese noodhulp
Indien op vel: Was met baie water
Indien ingeasem: Vewyder persoon na vars lug en hou rustig vir goeie asemhaling
Verwyder onmiddelik besoedelde klere en was voor hergebruik

- **Storing**

Stoor agter slot en grendel
Stoor in goed deurlugte area. Hou houder dig toe

- **Wegdoening**

Doen weg met inhoud en/of houers deur te lewer aan goedgekeurde afval hanteringsfasiliteite

BETROKKE BESTANDDELE

Gevaarlike bestanddeel	Massa %	GHS Klassifikasie
Terbufos	15	Akkute Giftigheid - Oraal: Category 2. Akkute Giftigheid - Vel: Category 1. Waterlewe Akkute Giftigheid: Category 1. Waterlewe Kroniese Giftigheid: Category 1. M Factor: 1000
Dietiel Glikol	<10	Akkute Giftigheid - Oraal: Category 4. STOT. SE, Category 3. STOT. RE, Category 3.

NOODHULPBEHANDELING:

- VERKRY ALTYD ONMIDDELLIKE MEDIESE BEHANDELING EN TOON DIE ETIKET AAN DIE GENEESHEER.
- Verwys na **Reaksies** onder VOORSORGMAATREËLS.

NOTA VIR GENEESHEER:

Dien atropiensulfaat binne-aars (1 - 4 mg) toe elke 5 - 10 minute tot die eerste tekens van atropinisasie (droë gloeiende vel en tachycardia) voorkom. 2-PAM teen 50 mg/kg tot 'n totale dosis van 1 - 2 g of Protopam teen $\frac{2}{3}$ van hierdie dosis. Herhaal toediening van oksieme indien nodig. Moet geen morfine toedien nie.

WERKINGSMETODE:

Bitrad Terbufos behoort tot die organofosfaat insekdoders, geklassifiseer as groeppkode 1B (IRAC) wat 'n asetielcholien esterase inhibeerder is.

WEERSTANDWAARSKUWING:

Enige aalwurm/insekbevolking mag individue bevat wat natuurlike weerstand tot Terbufos en ander groep kode 1B insekdoders het. Hierdie weerstandige individue kan uiteindelik die bevolking domineer indien groep 1B produkte herhaaldelik gebruik word. Hierdie weerstandige aalwurms/insekte mag nie beheer word deur Terbufos 15 GR of enige ander groep kode 1B produkte nie. Om weerstand te voorkom:

- Voorkom uitsluitlike herhaaldelike gebruik van dieselfde produkgroep kode. Wissel gebruik af met produkte van ander insek groeppcodes.
 - Integreer beheer metodes (chemiese verbouingspraktyke, biologies) in programme.
- Vir spesifieke inligting oor weerstandbestuur, kontak die Verspreider van hierdie produk.

GEBRUIKSAANWYSINGS:**GEBRUIK SLEGS SOOS AANGEDUI**

LET WEL: Sien WAARSKUWINGS vir die tydperk wat toegelaat moet word vanaf laaste toediening tot oes.

TOEDINGINGSRIGLYNE: Dien slegs toe met planttyd en verseker dat korrels met grond bedek is.

GEWAS/PLAAG	DOSIS	GEBRUIKSAANWYSINGS
MIELIS, GRAANSORGUM, SONNEBLOMME, GRONDBONE, DROë BONE. Swartmieliekewer	33 g/ 100 m Plantry	Plaas die korrels met behulp van 'n korreltoediener direk voor die drukwiel van die planter in 'n band nie breër as 5 cm nie. Bedek die korrels met grond met behulp van 'n yster staaf wat agter die planter gesleep word.
MIELIES, SONNEBLOMME, GRONDBONE en DROë BONE. Aalwurm, Valsdraadwurm, <i>Astylus</i> kewerlarve, Wortelwurm, Draadwurm.	66 g/ 100 m Plantry	VOORKOM KONTAK TUSSEN DIE SAAD EN DIE KORRELS. Beste resultate sal verkry word as toediening in klam grond geskied.

AARTAPPELS Swartmieliekewer	66 g/ 100 m Plantry	Die saad moet met ten minste 5 cm grond bedek wees voordat die korrels toegedien word. Die korrels moet in 'n band van ongeveer 15 cm toegedien word. Swartmieliekewer sal slegs vir 'n beperkte tyd beheer word. Indien nodig moet verdere beheer gedoen word met 'n geskikte insekmiddel. Beste resultate sal verkry word as toediening in klam grond geskied.
---------------------------------------	---------------------	--