

#### WARNINGS:

- Allow the following withholding periods between application and grazing or feeding:  
Barley, Oats, Lucerne & Wheat:..... 40 days | Maize:.....14 days
- Handle with care.
- Poisonous when swallowed, inhaled or absorbed through the skin.
- Toxic to fish and wildlife.
- Store in a cool place, away from food, feed, seed or other agricultural remedies.
- Keep out of reach of children, uninformed persons and animals.
- **Re-entry** – Do not enter treated area within one day after treatment unless wearing protective clothing.
- In case of poisoning – CALL A DOCTOR AND MAKE THIS LABEL AVAILABLE TO HIM.
- **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.
- Although **BROMOXYNIL 450 EC** has been tested on most important cultivars and no significant phytotoxicity in the form of yield reduction has been recorded under normal growing conditions, this does not mean that a more sensitive cultivar might not be commercialised in the future. Where a new cultivar is encountered, large areas should not be sprayed without prior testing of **BROMOXYNIL 450 EC** on that cultivar.

*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, incompatibility with other substances not indicated on the label and the occurrence of resistance of the weeds to the remedy concerned as well as by the method, time and accuracy of application. The registration holder further 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 event of any uncertainty.*

#### PRECAUTIONS:

- Do not inhale fumes or spray mist.
- Wear protective clothing (overall, boots, rubber gloves) when handling or applying the product. Wash contaminated clothing daily.
- Wash with soap and water after use or skin contact. In case of eye contact rinse immediately with running water.
- Do not eat, drink or smoke whilst mixing or applying or before washing hands and face and changing clothes.
- Prevent contamination of food, eating utensils, feed and drinking water.
- Prevent spray drift onto other crops, grazing, rivers, dams or other areas not under treatment.
- Clean all equipment thoroughly after use and do not pollute the environment with wash water.
- When empty, invert the container over the spray tank or mixing tank and allow it to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume water equal to at least one tenth of that of the container and add the rinsings to the contents of the spray tank. Destroy the container by puncturing and burying or burning it. Do not use the container for any other purpose.

#### FIRST AID TREATMENT:

**General advice:** Remove contaminated clothing immediately and dispose of safely.

**Inhalation:** Move to fresh air. Keep patient warm and at rest. If symptoms persist, call a physician.

**Skin contact:** Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. Call a physician or poison control center immediately.

**Eye contact:** Wash off immediately with plenty of water for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.

**Ingestion:** Rinse out mouth and give water in small sips to drink. Do NOT induce vomiting. Keep patient warm and at rest. Risk of product entering the lungs on vomiting after ingestion. Call a physician or poison control center immediately.

#### NOTES TO PHYSICIAN:

**Symptoms:** Local, Sensitisation, The product causes irritation of eyes, skin and mucous membranes.

**Systemic:** Tiredness, thirst, sweating, anxiety, hyperventilation, Tachycardia, muscle rigidity, hyperthermia

#### TREATMENT

**Local treatment:** Initial treatment: symptomatic.

**Systemic treatment:** Initial treatment: symptomatic.

In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours.



# BROMOXYNIL 450 EC

Reg No/Nr: L 9620: Act/Wet 36 of/van 1947

Emulsifiable concentrate. A herbicide for the selective control of certain broadleaf weeds in wheat, barley, oats, lucerne and maize.

Emulgeerbare konsentraat. Onkruidodder vir die selektiewe beheer van sekere breëblaaronkruid in koring, gars, hawer, lusern en mielies.

<b>HRAC: HERBICIDE GROUP CODE</b>	<b>C3</b>	<b>HRAC: ONKRUIDDODER GROEPKODE</b>
-----------------------------------	-----------	-------------------------------------

## ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL:

Bromoxynil (nitrile) (octanoate).....450 g/l ..... Bromoksinil (nitriël) (oktanoaat)

Manufacture Date:  
Vervaardigingsdatum

Batch No.:  
Lotnommer

NET CONTENTS/NETTO INHOUD

**SEE ENCLOSED LEAFLET FOR FULL PARTICULARS  
SIEN INGESLOTE VOUBILJET VIR VOLLE BESONDERHEDE**

REGISTRATION HOLDER/REGISTRASIEHOUER:

**CEDAR FALL PROPERTIES 130 (Pty) Ltd**

Co. Reg. No./Mpy. Reg. Nr.: 2006/031383/07

61 Marshall Drive, Old Mill Industrial Park, Mount Edgecombe, South Africa, 4300 • Tel: 031 003 3486

UN No.: 3082



HARMFUL  
SKADELIK



However, the application of activated charcoal and sodium sulphate is always advisable.

In case of hyperthermia physical cooling is advisable; in case of muscle rigidity muscle relaxants and mechanical ventilation may support in counteracting hyperthermia.

There is no specific antidote.

#### **RESISTANCE WARNING:**

**BROMOXYNIL450 EC** is a member of the nitrile group of herbicides. The mode of action of this group is the inhibition of photosynthesis at photosystem II Group Code C3 and also uncoupling (membrane disruption) Group Code M. As such it is classified by HRAC as a herbicide belonging to both Group Codes C3 & M. Since **BROMOXYNIL 450 EC** has two different modes of action, resistance is less likely to develop than in the case of certain other herbicide groups. However, any weed population may contain individuals naturally resistant to Bentrol Super and other Group Codes C3 & M herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **BROMOXYNIL 450 EC** or any other Group Codes C3 & M herbicides.

Since the presence of resistant weeds is difficult to detect prior to herbicide application, it is of the utmost importance that treated areas be inspected at regular intervals to identify the occurrence of herbicide-resistant weeds timeously. Cedar Falls Properties (Pty) Ltd will not accept liability for performance failures in the event of a build-up of resistant weeds resulting from inadequate resistance management practices as indicated on the label.

To delay herbicide resistance:

- Avoid excessive repeated use of herbicides from the same herbicide group code. Alternate or tank mix with products from different herbicide group codes,
- Integrate other control methods (chemical, cultural, biological) into weed control programmes.

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

**DIRECTIONS FOR USE: Use only as indicated.**

#### **COMPATIBILITY:**

Compatibility studies have been conducted with **BROMOXYNIL 450 EC** in combination with each ONE of the remedies listed below (unless otherwise specified in this label):

Do not use **BROMOXYNIL 450 EC** in a tank mixture with parathion.

AS VARIATIONS MAY EXIST BETWEEN FORMULATIONS OF PRODUCTS CONTAINING THE SAME ACTIVE INGREDIENTS, THE TRADE NAMES AND REGISTRATION NUMBERS OF THE TESTED PRODUCTS ARE SHOWN. DO NOT MIX **BROMOXYNIL 450 EC** WITH ANY OTHER PRODUCTS.

**BROMOXYNIL 450 EC** may safely be mixed with the following products at the recommended concentrations: Atrazine 500 SC and MCPA (potassium salt)

#### **MIXING INSTRUCTIONS:**

Thoroughly mix the recommended quantity of **BROMOXYNIL450 EC** with clean water as follows:

Put approximately half the required volume of water in the spray tank. Then add the required quantity of **BROMOXYNIL 450 EC** as recommended below and top up to the volume of water required. Ensure thorough mixing.

#### **METHOD OF APPLICATION:**

##### **GROUND APPLICATION:**

For application by means of tractor-mounted sprayer, the use of a conventional spray boom fitted with flat fan nozzles is recommended. Use a low spray pressure (100 – 300 kPa) so that **BROMOXYNIL 450 EC** is applied as a coarse droplet spray. DO NOT APPLY AT HIGH PRESSURE. Ensure thorough coverage of the weeds by applying at least 200 ℓ of spray mixture per hectare.

##### **AERIAL APPLICATION:**

DO NOT COMMENCE AERIAL APPLICATION BEFORE CONSULTING YOUR **BROMOXYNIL 450 EC** REPRESENTATIVE.

Aerial application may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of STANSA Code 0118 (Aerial Application of Agricultural Pesticides). 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 are met:

##### **Equipment:**

- Use suitable atomising equipment (hydraulic nozzles or rotary atomisers) that will produce the desired droplet size and coverage, but which will ensure the minimum loss of product through drift.
- The operator must use a setup that will produce a droplet spectrum with the lowest possible relative span.
- All nozzles/atomisers should be positioned within the inner 75 % of the wingspan to prevent droplets from entering the wingtip vortices.

**Application parameters:**

- A minimum volume of 40 ℓ/spray mixture 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.
- A droplet coverage of 35 – 40 droplets per cm<sup>2</sup> must be recovered at the target.
- A droplet spectrum with a VMD of 350 – 400 microns is recommended. Ensure that the production of fine droplets (smaller than 150 microns) is restricted to a minimum.
- The height of the spray boom should be maintained at 3 – 4 metres above the target. Do not spray when aircraft is in a climb, at the top or during a dive, or when banking.
- Apply before the crop becomes too dense, thus preventing proper coverage of the weeds.

**Meteorological conditions:**

- The difference between the wet and dry bulb readings as determined by a whirling hygrometer, must not exceed 8 °C.
- Do not spray under turbulent, unstable conditions during the heat of the day when rising thermals and downdraughts occur.
- Do not spray under temperature inversion conditions (spraying in or above the inversion layer).
- Do not spray if the wind speed exceeds 15 km/h.

**General:**

- Ensure that fields are accurately marked and 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.

**APPLICATION TABLE:**

CROP	DOSAGE RATE	REMARKS
<b>Cereals: WHEAT, OATS &amp; BARLEY</b>	0,75 – 1,0 ℓ/ha	Apply when the WEEDS are fully emerged but not older than the 6-leaf stage (3-leaf stage for problem weeds listed below). Use the higher rate for aerial application.
	0,75 ℓ plus 0,5 – 1,0 ℓ MCPA (potassium salt)/ha	Refer to Note 7 for time of application. Use the higher rate of MCPA only in the Eastern Free State when <i>Polygonum aviculare</i> is a problem.
<b>LUCERNE (UNDERSOWN IN GRAIN CROPS)</b>	0,75 – 1,0 ℓ/ha	Apply when the WEEDS are fully emerged but not older than the 6-leaf stage (3-leaf stage for problem weeds listed below). Do not apply to lucerne younger than the second trifoliate leaf stage or where clovers have been undersown. Use the higher rate for aerial application.
<b>LUCERNE (ESTABLISHED)</b>	1,0 – 1,5 ℓ/ha	Apply after cutting the lucerne and after the WEEDS are fully emerged but not older than the 6-leaf stage (3-leaf stage for problem weeds listed below). Use the higher rate for aerial application, or for ground application when the weed stand is very dense.
<b>MAIZE</b>	0,75 – 1,0 ℓ/ha	The application should be when the weeds are fully emerged but not older than the 6-leaf stage (3-leaf stage for problem weeds listed below). The higher rate is recommended for aerial application.

**IMPORTANT NOTES:**

1. The use of **BROMOXYNIL 450 EC** in combination with wetting agents is not advisable as it may lead to crop damage or reduced efficacy (except when used in a tank mixture with Cossack or Hussar).
2. Do not apply **BROMOXYNIL 450 EC** when weeds are older than specified, as this will result in poor weed control.
3. Poor weed control may result if **BROMOXYNIL 450 EC** is applied when the weeds have been subjected to moisture stress or other stress. Apply only under moist conditions, when the weeds are actively growing.
4. Avoid application when the wind is blowing strongly.
5. Ensure thorough coverage of weeds.
6. Weeds which have not emerged at the time of application will not be controlled by **BROMOXYNIL 450 EC** alone.
7. When MCPA is added application to wheat must be made between growth stages 7 and 13 according to the list of growth stages issued by the Small Grain Institute, Bethlehem. Apply to barley when the plants are in the 5 to 7-leaf stage. In the Winter Rainfall Region, when MCPA is added @ 0,5 ℓ/ha, the mixture may be applied in small grains from the 3-leaf stage of the CROP. Apply **BROMOXYNIL 450 EC** /MCPA mixtures between emergence and the 6-leaf stage of the WEEDS.

8. Under certain conditions **BROMOXYNIL 450 EC** may cause some leaf scorch or yellowing in lucerne or grain crops, however, this is of a transitory nature and yield will not be affected.
9. When **BROMOXYNIL 450 EC** is mixed with any other product, the information on the label of that product must also be carefully read and its instructions followed.

**WEEDS CONTROLLED BY BROMOXYNIL 450 EC:**

**NOTE:** This product controls some annual broadleaf weeds. Other broadleaf weeds that were not present during the development trials with the product, may possibly also be controlled to a certain degree. The registration holder does not accept any responsibility for unlisted weeds.

SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME
<i>Acanthospermum hispidum</i>	Upright starbur	<i>Galinsoga parviflora</i>	Gallant Soldier
<i>Amaranthus hybridus</i>	Common pigweed	<i>Gisekia pharnacioides</i>	Gisekia
<i>Amaranthus spinosus</i>	Thorny pigweed	<i>Helianthus annuus</i>	Sunflower (erratic control)
<i>Amaranthus thunbergii</i>	Red pigweed	<i>Hibiscus trionum</i>	Bladder weed
<i>Amsinckia calycina</i>	Fiddle neck	<i>Ipomoea coscinosperma</i>	-
<i>Anthemis cotula</i>	Stinking mayweed	<i>Ipomoea purpurea</i>	Common morning glory
<i>Arctotheca calendula</i>	Cape marigold	<i>Lepidium bonariense</i>	Pepperweed
<i>Argemone subfusiformis</i>	White-flowered Mexican poppy	<i>Mellilotus indica</i>	Annual yellow sweet clover
<i>Bidens formosa</i>	Cosmos	<i>Nicandra physalodes</i>	Apple of Peru
<i>Bidens pilosa</i>	Common Blackjack	<i>Pentzia grandiflora</i>	Stinkweed
<i>Bilderdykia convolvulus</i>	Climbing knotweed	<i>Physalis angulata</i>	Wild gooseberry
<i>Capsella bursa-pastoris</i>	Shepherd's Purse	<i>Richardia brasiliensis</i>	Tropical Richardia
<i>Chenopodium album</i>	White goosefoot	<i>Ricinus communis</i>	Castor-oil plant
<i>Chenopodium ambrosioides</i>	Wormseed goosefoot	<i>Schkuhria pinnata</i>	Dwarf marigold
<i>Chenopodium carinatum</i>	Green goosefoot	<i>Senecio burchellii</i>	Molteno disease senecio
<i>Chenopodium multifidum</i>	Stinking goosefoot	<i>Sesamum triphyllum</i>	Wild sesame
<i>Chenopodium murale</i>	Nettle-leaved goosefoot	<i>Sida cordifolia</i>	Heartleaf Sida
<i>Chenopodium schraderianum</i>	Schrader goosefoot	<i>Solanum nigrum</i>	Black nightshade
<i>Citrullus lanatus</i>	Wild watermelon	<i>Sonchus oleraceus</i>	Sowthistle
<i>Cleome gynandra</i>	Spider-wisp	<i>Tagetes minuta</i>	Khakiweed
<i>Cucumis myriocarpus</i>	Striped wild cucumber	<i>Vicia hirsute</i>	Tiny purple vetch
<i>Datura ferox</i>	Large thorn apple	<i>Vicia sativa</i>	Broad-leaved purple vetch
<i>Datura stramonium</i>	Thorn apple	<i>Xanthium spinosum</i>	Spiny cocklebur
<i>Flaveria bidentis</i>	Smelter's bush	<i>Xanthium strumarium</i>	Cocklebur

**PROBLEM WEEDS:**

These weeds will only be controlled by **BROMOXYNIL 450 EC** if sprayed between emergence and the 3-leaf stage.

Spray *Tribulus terrestris* when the plantlets are no bigger than 25 mm in diameter.

SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME
<i>Amaranthus deflexus</i>	Perennial pigweed	<i>Raphanus raphanistrum</i>	Wild radish
<i>Cleome monophylla</i>	Spindlepod	<i>Sisymbrium thellungii</i>	Common wild mustard
<i>Emex australis</i>	Spiny Emex	<i>Tribulus terrestris</i>	Dubbeltjie
<i>Polygonum aviculare</i>	Prostrate knotweed		

#### WAARSKUWINGS:

- Laat die volgende wagperiodes toe tussen bespuiting en voer of beweiding.  
Gars, Hawer, Koring en Lusern..... 40 dae | Mielies.....14 days
- Hanteer versigtig.
- Giftig indien ingesluk, ingesam of deur die vel geabsorbeer word.
- Giftig vir visse en natuurlewe.
- Berg in 'n koel plek, weg van voedsel, voer, saad of enige ander landboumiddels.
- Hou buite bereik van kinders, ongeligte persone en diere.
- **Herbetreding** – Moenie behandelde gebied binne een dag na bespuiting binnegaan nie, tensy beskermende oorklere gedra word.
- In geval van vergiftiging – ONTBIED 'N GENEESHEER EN STEL HIERDIE ETIKET AAN HOM BESKIKBAAR.
- **Lugtoediening** - stel alle persone in die onmiddellike omgewing van die gebied wat behandel gaan word in kennis en reik die nodige waarskuwings uit. Moenie aangrensende gebiede of waterbronne bespuit of toelaat dat die sproeinewel daarheen oorwaai nie.
- Alhoewel **BROMOXYNIL 450 EC** op die meeste belangrike kultivars getoets is, met geen betekenisvolle simptome van fitotoksisiteit in die vorm van oesverlagings, onder normale groei-toestande nie, beteken dit nie dat 'n meer vatbare kultivar nie in die toekoms gekommersialiseer kan word nie. Waar 'n nuwe kultivar teëgekomp word, moet groot areas nie behandel word voordat **BROMOXYNIL 450 EC** op daardie kultivar getoets is nie.

*Alhoewel hierdie middel omvattend onder groot verkeidenheid 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 word nie, die voorkoms van weerstand van die plaag teen die betrokke middel, sowel as deur die metode, tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei, die omgewing of die nadelige effek op mens of dier of vir 'n gebrek aan werking van die betrokke middel, as gevolg van versuim van die gebruiker om die etiketaanwysings na te volg of die ontstaan van toestande, wat nie voorsien kon word in terme van die registrasie nie. Raadpleeg die verskaffer in die geval van enige onsekerheid.*

#### VOORSORGMATREËLS:

- Moenie die dampe of sproeinewel inasem nie.
- Dra beskermende klere (oorpak, stewels, rubberhandskoene) wanneer die produk hanteer of toegedien word.
- Was besoedelde klere daaglik.
- Was met seep en water na gebruik of velkontak. In geval van oogkontak spoel onmiddellik met lopende water.
- Moenie eet, rook of drink tydens vermenging of toediening of voordat hande en gesig gewas en skoon klere aangetrek is nie.
- Verhoed besoedeling van voedsel, eetgerei, voer en drinkwater.
- Verhoed die wegdrywing van sproeinewel na ander gewasse, weidings, riviere, damme of ander gebiede wat nie behandel word nie.
- Maak alle apparaat deeglik skoon na gebruik en moenie die omgewing met spoelwater besoedel nie.
- Sodra die houer leeg is keer dit om oor die spuittenk of mengbak en dreineer vir minstens 30 sekondes nadat die vloeï tot 'n gedrup verminder het. Spoel die houer daarna driekeer uit met 'n volume water gelyk aan minstens 'n tiende van die houer en gooi die spoelwater by die inhoud van die spuittenk. Vernietig die houer deur gate daarin te maak en te begrawe of te verbrand.
- Moenie die houer vir enige ander doel gebruik nie.

#### NOODHULPBEHANDELING:

**Algemene advise:** Verwyder besoedelde klere onmiddellik en en raak ontslae daarvan in 'n veilige manier.

**Inaseming:** Verwyder patient van besoedelde area na vars lug. Hou pasiënt warm en stel gerus. Indien simptome voortduur, kry mediese hulp.

**Velkontak:** Was onmiddellik met baie seep en water vir minstens 15 minute. Verwyder besoedelde klere en was voor dit weer gebruik word. Bel onmiddellik 'n dokter of gif beheer sentrum.

**Oogkontak:** Was onmiddellik met baie water vir ten minste 15 minute. Verwyder kontaklense, indien teenwoordig, na die eerste 5 minute van uitspoel, en duur voort vir nog 10 minute. Kry mediese aandag indien irritasie ontwikkel en voortduur.

**Inname:** Spoel mond uit en gee water. Die patient moet in klein slukkies drink. Daar is 'n risiko dat braking kan voorkom na die inname van die produk wat die longe kan betree en ernstige skade veroorsaak. Moet nie braking veroorsaak. Hou pasiënt warm en rustig. Bel onmiddellik 'n dokter of gif beheer sentrum.

#### NOTA AAN GENEESHEER:

**Simptome:** Plaaslik: Sensitering. Die produk veroorsaak irritasie van die oë, vel en slymvliese.

**Sistemiese:** Moegheid, dors, sweet, angs, hiperventilasie, tagikardie, spierstyfheid, hipertermie.

## BEHANDELING

**Plaaslike behandeling:** Sien noordhulpbehandeling bo.

**Aanvanklike behandeling:** Simptomaties.

In geval van inname moet maagspoeling oorweeg word in gevalle van beduidende innames slegs binne die eerste 2 ure.

Maar die toepassing van geaktiveerde houtskool en natrium sulfaat is altyd raadsaam.

In die geval van hipertermie fisiese afkoeling word aanbeveel; in die geval van spierstyfheid, spierverslappers en meganiese ventilasie kan die bekampung van hipertermie ondersteun.

Daar is geen spesifieke teenmiddel nie.

## WEERSTANDSWAARSKUWING:

**BROMOXYNIL 450 EC** behoort aan die nriëel groep van onkruidodders. Die metode van werking van hierdie groep is die inhibering van fotosintese by fotosisteam II Groepkode C3 asook ont koppeling (membraanversteuring) Groepkode M.

As sulks word dit deur HRAC as Groepkodes C3 & M onkruidodder geklassifiseer. Aangesien **BROMOXYNIL 450 EC** twee metodes van werking het is die ontwikkeling van weerstand minder waarskynlik as in die geval van sekere ander onkruidoddergroepe. Nietemin, enige populasie van 'n spesifieke onkruid mag individue insluit wat 'n natuurlike weerstand teen Bentrol Super, of enige ander Groepkodes C3 & M onkruidodder het. Indien hierdie onkruidodders herhaaldelik aangewend word, kan die weerstandbiedende individue uiteindelik die onkruidpopulasie oorheers. Hierdie weerstandbiedende onkruid sal moontlik nie deur **BROMOXYNIL 450 EC** of enige ander Groepkodes C3 & M onkruidodder, beheer word nie.

Aangesien die voorkoms van weerstandbiedende onkruid moeilik is om te bepaal voor onkruidodder-toediening plaasvind, is dit uiters noodsaaklik dat behandelde gebiede met gereelde intervalle ondersoek word om weerstand vroegtydig te identifiseer. Cedar Falls Properties (Edms) Bpk. sal nie verantwoordelikheid aanvaar vir enige gebrek aan prestasie in die geval van die opbou van weerstand in die onkruidpopulasie as gevolg van onvoldoende onkruidbestandheidsbestuur soos aangedui op die etiket nie.

Om weerstand teen onkruidodders te vertraag:

- Vermoë die eksklusiewe herhaaldelike gebruik van onkruidodders in dieselfde onkruidoddergroepkode. Wissel af met, of gebruik tenkmengsels van produkte in verskillende onkruidoddergroepkodes.
- Integreer ander beheermaatreëls (chemies, verbouing, biologies) in onkruidbeheerprogramme.

Vir spesifieke inligting oor weerstandsbestuur, kontak die registrasiehouer.

**GEBRUIKSAANWYSINGS: Gebruik slegs soos aangedui.**

## VERENIGBAARHEID:

Verenigbaarheidstudies is gedoen met **BROMOXYNIL 450 EC** in kombinasie met elk van EEN van die middels hieronder gelys (tensy anders aangedui op hierdie etiket):

Moenie **BROMOXYNIL 450 EC** in 'n tenkmengsel met paration gebruik nie.

AANGESIEN VARIASIES MAG VOORKOM TUSSEN FORMULASIES VAN PRODUKTE WAT DIESELFDE AKTIEWE BESTANDELE BEVAT, WORD DIE HANDELSNAME EN REGISTRASIONOMMERS VAN DIE GETOETSTE PRODUKTE HIERBY AANGEDUI. MOENIE **BROMOXYNIL 450 EC** MET ENIGE ANDER PRODUKTE VERMENG NIE.

**BROMOXYNIL 450 EC** mag met veiligheid vermeng word met die volgende middels, teen die aanbevole spuitsterktes: Atrazine 500 SC en MCPA (kalium sout)

## MENGINSTRUKSIES:

Meng die aanbevole hoeveelheid **BROMOXYNIL 450 EC** deeglik met skoon water soos volg: Voeg eers ongeveer die helfte van die totale volume water in die spuittenk. Voeg dan die hoeveelheid **BROMOXYNIL 450 EC** soos hieronder aangedui by en daarna die oorblywende volume water soos benodig. Sorg dat die mengsel deeglik gemeng word.

## TOEDIENINGSMETODE

### GRONDTOEDIENING

Vir toediening d.m.v. 'n trekkerspuit word aanbeveel dat 'n konvensionele spuitbalk met platwaaier spuitpunte gebruik word. Gebruik 'n lae spuitdruk (100 - 300 kPa) sodat **BROMOXYNIL 450 EC** in die vorm van 'n growwe sproei aangewend word. MOENIE TEEN HOË DRUK AANWEND NIE. Sorg dat deeglike bedekking van die onkruid verky word deur minstens 200 l/spuitmengsel per hektaar toe te dien.

### LUGTOEDIENING:

MOENIE LUGBESPUITING BEGIN VOORDAT U **BROMOXYNIL 450 EC** VERTEENWOORDIGER GESPREEK HET NIE.

Lugtoediening mag slegs deur 'n geregistreerde lugbespuitingsoperateur met 'n korrek gekalibreerde, geregistreerdevlugtuig volgens die instruksies van STANSA Kode 0118 (Aerial Application of Agricultural Pesticides)gedoen word. Dit is belangrik om te verseker dat die

sputmengsel eweredig oor die teikenarea versprei word en dat die verliesaan spuitmengsel tydens toediening tot 'n minimum beperk word. Dit is dus belangrik om aan die volgende kriteria te voldoen:

#### Toerusting:

- Gebruik geskikte atomiseringsapparaat (hidroliese of roterende spuitkoppe) wat die vereiste druppelgrootte en bedekking sal produseer, maar wat die minste verlies van produk deur wegdrywing sal verseker.
- Die operateur moet 'n stelsel gebruik wat 'n druppelspektrum met die kleinste moontlike relatiewe span sal produseer.
- Al die spuitneuse/atomiseerders moet in die binneste 75 % van die vierkspan geplaas word om die beweging van druppels in die vierkvoorteks in te verhoed.

#### Toedieningsparameters:

- 'n Minimum volume van 40 ℓ spuitmengsel per hektaar word aanbeveel. Aangesien hierdie produk nie teen 'n verlaagde volume getoets is nie, kan die registrasiehouer nie effektiwiteit waarborg, of verantwoordelik gehou word vir enige nadelige effek indien hierdie produk teen 'n laer volume as hierbo aanbeveel, uit die lug toegedien word nie.
- 'n Druppelbedekking van 35 – 40 druppels per cm<sup>2</sup> moet op die teikenarea herwin word.
- 'n Druppelspektrum met 'n VMD van 350 – 400 mikron word aanbeveel. Verseker dat die produksie van fyn druppels (kleiner as 150 mikron) tot 'n minimum beperk word.
- Die hoogte van die spuitbalk moet op 3 – 4 meter bo die teiken gehandhaaf word. Moenie spuit wanneer die vliegtuig aan die bopunt is van, of tydens 'n duik, of terwyl dit uitklim of draai nie.
- Dien toe voordat die gewas te ruig word wat sal verhoed dat onkruid behoorlik bedek word.

#### Meteorologiese toestande:

- Die verskil tussen die nat- en droëbollesing, soos met 'n swaaihigrometer bepaal, moet nie 8°C oorskry nie.
- Moenie toedien tydens turbulente, onstabiele toestande gedurende die hitte van die dag wanneer styg en dalende konveksie windbeweging plaasvind nie.
- Moenie toedien onder temperatuur inverse toestande (deur bo of binne die inversielaag te spuit) nie.
- Moenie spuit indien die windspoed 15 km/uur oorskry nie.

#### Algemeen:

- Sorg dat die lande akkuraat gemerk is en die spuitoperateur presies weet watter lande gespuit moet word.
- Verkyr 'n versekering van die spuitoperateur dat aan die bogenoemde vereistes voldoen sal word.

#### TOEDIENINGSTABEL:

GEWAS	DOSIS/HA	OPMERKINGS
<b>Graangewasse: KORING, GARS &amp; HAWER</b>	0,75 – 1,0 ℓ/ha	Dien toe wanneer die ONKRUID volledig opgekom het maar nie ouer as die 6-blaarstadium is nie (3-blaarstadium vir probleemonkruid hieronder aangedui). Gebruik die hoër dosis vir lugbespuiting.
	0,75 ℓ plus 0,5 – 1,0 ℓ MPCA (kalium sout)/ha	Verwys na Nota 7 vir tyd van toediening. Gebruik die hoër dosis MCPA slegs in die Oos Vrystaat wanneer Polygonum aviculare 'n probleem is.
<b>LUSERN (ONDERGESAAI IN GRAAN GEWASSE)</b>	0,75 – 1,0 ℓ/ha	Dien toe wanneer die ONKRUID volledig opgekom het maar nie ouer as die 6-blaarstadium is nie (3-blaarstadium vir probleemonkruid hieronder aangedui). Moenie toedien op lusern jonger as die tweede driebladblaar- stadium of waar klawers ondergesaai is nie. Gebruik die hoër dosis vir lugbespuiting.
<b>LUCERNE (GEVESTIG)</b>	1,0 – 1,5 ℓ/ha	Dien toe nadat die lusern gesny is en nadat die ONKRUID volledig opgekom het maar nog nie ouer as die 6-blaarstadium is nie (3-blaarstadium vir probleemonkruid hieronder aangedui). Gebruik die hoër dosis vir lugtoediening of wanneer die onkruidstand baie dig is.
<b>MIELIES</b>	0,75 – 1,0 ℓ/ha	Die toediening moet wees wanneer die onkruid ten volle voorkom maar nie ouer as die 6-blaar stadium is nie (3-blaar stadium vir probleem onkruid hieronder gelys). Die hoër dosis word aanbeveel vir lugtoediening.



**BELANGRIKE NOTAS:**

- BROMOXYNIL 450 EC** moet nie saam met benattingsmiddels gebruik word nie, aangesien dit óf skade aan die gewas kan veroorsaak óf effektiwiteit kan benadeel (tensy in 'n tenkmengsel met Cossack of Hussar gebruik word).
- BROMOXYNIL 450 EC** moet nie toegedien word indien die onkruid ouer is as wat gespesifiseer is nie aangesien dit sal lei tot swak onkruidbeheer.
- Swak onkruidbeheer mag verkry word indien **BROMOXYNIL 450 EC** toegedien word wanneer die onkruid aan vogtekort of ander stremminge onderworpe was of onderworpe is - dien toe slegs onder vogtige toestande, wanneer die onkruid aktief groei.
- Vermý toediening wanneer die wind sterk waai.
- Maak seker dat deeglike bedekking van die onkruid verkry word.
- Onkruid wat tydens bespuiting nog nie opgekom het nie sal nie deur **BROMOXYNIL 450 EC** alleen beheer word nie.
- Wanneer MCPA bygevoeg word moet toediening op koring geskied tussen groeistadia 7 en 13 volgens die Kleingraaninstituut te Bethlehem se lys van groeistadia. Dien toe op gars as die plante in die 5 tot 7-blaarstadium is en op haver in die 5-blaarstadium. In die Winterreënveldgebied, wanneer MCPA @ 0,5 l/ha bygevoeg word, kan toediening geskied vanaf die 3-blaarstadium van die kleingraan. Dien **BROMOXYNIL 450 EC**/MCPA mengsels tussen opkom en 6-blaarstadium van onkruid toe.
- Onder sekere toestande kan **BROMOXYNIL 450 EC** 'n mate van blaarskroei of vergeling op lusern en graangewasse veroorsaak. Dit is egter tydelik van aard en opbrengs sal nie beïnvloed word nie.
- Wanneer **BROMOXYNIL 450 EC** met enige ander produk gemeng word, moet die inligting op dié produk se etiket noukeurig gelees word en die gebruiksaanwysings gevolg word.

**ONKRUIDE WAT DEUR BROMOXYNIL 450 EC BEHEER WORD:**

**NOTA:** Hierdie produk beheer sommige breekblaaronkruid. Ander onkruidspesies wat nie tydens die ontwikkelingsproewe met die middel voorgekom het nie, kan ook moontlik in 'n meerdere of mindere mate beheer word. Die registrasiehouer aanvaar egter geen aanspreeklikheid ten opsigte van ongelyste onkruid nie.

WETENSKAPLIKE NAAM	GEWONE NAAM	WETENSKAPLIKE NAAM	GEWONE NAAM
<i>Acanthospermum hispidum</i>	regopsterklits	<i>Galinsoga parviflora</i>	knopkruid
<i>Amaranthus hybridus</i>	gewone misbredie	<i>Gisekia pharanceoides</i>	Gisekia
<i>A. spinosus</i>	doringmisbredie	<i>Helianthus annuus</i>	sonneblom (wisselvallige beheer)
<i>A. thunbergii</i>	rooi misbredie	<i>Hibiscus trionum</i>	terblansbossie
<i>Amsinckia calycina</i>	vioolnek	<i>Ipomoea coscinosperma</i>	-
<i>Anthemis cotula</i>	stink kamilie	<i>I. purpurea</i>	purperwinde
<i>Arctotheca calendula</i>	soetgousblom	<i>Lepidium bonariense</i>	peperbossie
<i>Argemone subfusiformis</i>	witblom-bloudissel	<i>Mellilotus indica annual</i>	eenjarige geelstinkklawer
<i>Bidens pilosa</i>	knapsekêrel	<i>Nicandra physaloides</i>	basterappelliefie
<i>Capsella bursa-pastoris</i>	herderstassie	<i>Pentzia grandiflora</i>	stinkkruid
<i>Chenopodium album</i>	withondebossie	<i>Physalis angulata</i>	wild-appelliefie
<i>C. ambrosioides</i>	kruiehondebossie	<i>Richardia brasiliensis</i>	tropiese Richardia
<i>C. carinatum</i>	groenhondebossie	<i>Ricinus communis</i>	kasterolieplant
<i>C. multifidum</i>	stinkhondebossie	<i>Schkuhria pinnata</i>	kleinkakiebos
<i>C. murale</i>	muurhondebossie	<i>Senecio inaequidens</i>	geelgifbossie
<i>C. schraderianum</i>	vloiehondebossie	<i>Sesamum triphyllum</i>	wildesesam
<i>Citrullus lanatus</i>	wildewaatlemoen	<i>Sida cordifolia</i>	hartblaartaaiman
<i>Cleome gynandra</i>	snotterbelletjie	<i>Solanum nigrum</i>	nastergal
<i>Cosmos bipinnatus</i>	kosmos	<i>Sonchus oleraceus</i>	sydissel
<i>Cucumis myriocarpus</i>	wildekomkommer	<i>Tagetes minuta</i>	kakiebos
<i>Datura ferox</i>	grootstinkblaar	<i>Vicia hirsuta</i>	kleinperswieke

WETENSKAPLIKE NAAM	GEWONE NAAM	WETENSKAPLIKE NAAM	GEWONE NAAM
<i>D. stramonium</i>	stinkblaar	<i>V. sativa</i>	breëblaarperskewieke
<i>Fallopia convolvulus</i>	slingerduisendknoop	<i>Xanthium spinosum</i>	boetebossie
<i>Flaveria bidentis</i>	smeltersbossie	<i>X. strumarium</i>	kankerroos

**PROBLEEMONKRUIDE:**

Die volgende onkruidspesies word deur **BROMOXYNIL 450 EC** beheer slegs indien hulle tussen opkom en die 3-blaarstadium gespuit word. Spuit *Tribulus terrestris* alvorens die plantjies se deursnee 25 mm oorskry.

WETENSKAPLIKE NAAM	GEWONE NAAM	WETENSKAPLIKE NAAM	GEWONE NAAM
<i>Amaranthus deflexus</i>	meerjarige misbredie	<i>Raphanus raphanistrum</i>	ramenas
<i>Cleome monophylla</i>	rusperbossie	<i>Sisymbrium thellungii</i>	gewone wildemosterd
<i>Emex australis</i>	Kaapse dubbeltjie	<i>Tribulus terrestris</i>	dubbeltjie
<i>Polygonum aviculare</i>	voëlduisendknoop		





# BROMOXYNIL 450 EC

Reg No/Nr: L 9620: Act/Wet 36 of/van 1947

Emulsifiable concentrate. A herbicide for the selective control of certain broadleaf weeds in wheat, barley, oats, lucerne and maize.

Emulgeerbare konsentraat. Onkruidodder vir die selektiewe beheer van sekere breëblaaronkruid in koring, gars, hawer, lusern en mielies.

<b>HRAC: HERBICIDE GROUP CODE</b>	<b>C3</b>	<b>HRAC: ONKRUIDDODER GROEPKODE</b>
-----------------------------------	-----------	-------------------------------------

## ACTIVE INGREDIENT/AKTIEWE BESTANDDEEL:

Bromoxynil (nitrile) (octanoate).....450 g/l ..... Bromoksinil (nitril) (oktanoaat)

Manufacture Date:  
Vervaardigingsdatum

Batch No.:  
Lotnommer

NET CONTENTS/NETTO INHOUD

**SEE ENCLOSED LEAFLET FOR FULL PARTICULARS  
SIEN INGESLOTE VOUBILJET VIR VOLLE BESONDERHEDE**

REGISTRATION HOLDER/REGISTRASIEHOUER:

**CEDAR FALL PROPERTIES 130 (Pty) Ltd**

Co. Reg. No./Mpy. Reg. Nr.: 2006/031383/07

61 Marshall Drive, Old Mill Industrial Park, Mount Edgecombe, South Africa, 4300 • Tel: 031 003 3486

UN No.: 3082



HARMFUL  
SKADELIK



LIFT HERE