

WARNINGS:

Hazard Statements: Flammable liquid and vapour. Toxic if swallowed. May be harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

PRE-HARVEST INTERVAL:

Allow the following withholding periods between application and grazing or feeding:

Barley, Oats, Lucerne & Wheat:	40 days
Maize	14 days

- Handle with care.
- Keep out of reach of children, uninformed persons and animals.
- **Re-entry interval:** 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 warning:** - 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.

DISCLAIMER:

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:

Precautionary Statements

General: If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use.

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof equipment. Use non-sparking tools. Take action to prevent static discharges. Do not breathe vapours, spray. Wash hands, forearms and face thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection.

Response IF SWALLOWED: Immediately call a poison centre or doctor. IF ON SKIN: Wash with plenty of water. Take off immediately all contaminated clothing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/attention. Call a poison centre or doctor if you feel unwell. Get medical advice/attention if you feel unwell. Specific treatment is urgent (see supplemental first aid instruction on this label). If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use D-powder, carbon dioxide (CO₂), alcohol resistant foam to extinguish. Collect spillage.

Storage: Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.

Disposal: Dispose of contents and container to an approved waste disposal plant.

- 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.
- **TRIPLE RINSE the empty container as follows:** Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container *three times in succession* with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of *via* an approved collector or recycler (www.croplife.co.za). Do not bury,

BROMOXYNIL 450 EC

Reg. No. / Nr L9620 Act No. 36 of 1947/ Wet Nr 36 van 1947

HERBICIDE



**READ THE LABEL AND ATTACHED PACKAGED LEAFLET BEFORE USE
KEEP OUT OF REACH OF CHILDREN AND ANIMALS**

HRAC HERBICIDE GROUP CODE

6/24

HRAC ONKRUIDDODER GROEP CODE:

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

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

ACTIVE INGREDIENT/AKTIEWE BESTANDEDEEL:

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



DANGER

Hazard Statements:

Flammable liquid and vapour.
Toxic if swallowed.
May be harmful in contact with skin.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
Suspected of damaging fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure.
Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
Do not breathe vapours, spray.
In case of inadequate ventilation wear respiratory protection.
IF SWALLOWED: Immediately call a poison centre or doctor.
IF ON SKIN: Wash with plenty of water.
Take off immediately all contaminated clothing.
IF IN EYES: Rinse cautiously with water for several minutes.
If skin irritation or rash occurs: Get medical advice/attention.
In case of fire: Use D-powder, carbon dioxide (CO₂), alcohol resistant foam to extinguish.

Batch No:

D.O.M:

D.O.E:

Net Contents:

See reverse of drum for details.

FOR FULL PARTICULARS SEE ATTACHED PAMPHLET.

VIR VOLLEDIGE BESONDERHEDE KYK AANGEHEGTE ETIKET.

UN No. / VR Nr: 1992



REGISTRATION HOLDER/ REGISTRASIEHOUER
Cedar Falls Properties 130 (Pty) Ltd
Reg. Nr.: Reg. 2006/031383/07
61 Marshall Drive, Old Mill Industrial Park,
Mount Edgecombe, South Africa, 4300
Tel: 031 003 3486

Poison Information Helpline (24 hrs): 0861 555 777



BARCODE

100302

- burn or donate the container to any other parties that may use it as a container for food or beverages.
- Destroy empty container and do not use for any other purpose.

RELEVANT SUBSTANCES

NAME	PRODUCT IDENTIFIER
Bromoxynil TC	CAS-No.: 1689-99-2
Solvent Naphtha	CAS-No.: 64742-94-5
Calcium dodecylbenzenesulfonate	CAS-No.: 26264-06-2
Polyoxyethylene phenyl ether	CAS-No.: 9004-78-8

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.

Treatment

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.

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 6 and also uncoupling (membrane disruption) Group Code 24. As such it is classified by HRAC as a herbicide belonging to both Group Codes 6 & 24. 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 **BROMOXYNIL 450 EC** and other Group Codes 6 & 24 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 6 & 24 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 130 (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 exclusive 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.

MODE OF ACTION: Selective, contact herbicide, absorbed by foliage, limited translocation.

DIRECTIONS OF USE: Use only as directed.

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)

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 aeriaily at a lower volume rate than recommended above.
- A droplet coverage of 35-40 droplets per cm² 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.

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.

APPLICATION TABLE:

CROP:	DOSAGE RATE:	REMARKS:
Cereals: WHEAT, OATS & BARLEY	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 Polygonum aviculare is a problem.
LUCERNE (UNDERSOWN IN GRAIN CROPS)	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.
LUCERNE (ESTABLISHED)	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.
MAIZE	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:

- 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**).
- Do not apply **BROMOXYNIL 450 EC** when weeds are older than specified, as this will result in poor weed control.
- 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.
- Avoid application when the wind is blowing strongly.
- Ensure thorough coverage of weeds.
- Weeds which have not emerged at the time of application will not be controlled by **BROMOXYNIL 450 EC** alone.
- 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.
- 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.
- 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.

<i>Acanthospermum hispidum</i>	Upright starbur
<i>Amaranthus hybridus</i>	Common pigweed
<i>Amaranthus spinosus</i>	Thorny pigweed
<i>Amaranthus thunbergii</i>	Red pigweed
<i>Amsinckia calycina</i>	Fiddle neck
<i>Anthemis cotula</i>	Stinking mayweed
<i>Arctotheca calendula</i>	Cape marigold
<i>Argemone subfusiformis</i>	White-flowered Mexican poppy
<i>Bidens formosa</i>	Cosmos
<i>Bidens pilosa</i>	Common Blackjack

<i>Bilderdykia convolvulus</i>	Climbing knotweed
<i>Capsella bursa-pastoris</i>	Shepherd's Purse
<i>Chenopodium album</i>	White goosefoot
<i>Chenopodium ambrosioides</i>	Wormseed goosefoot
<i>Chenopodium carinatum</i>	Green goosefoot
<i>Chenopodium multifidum</i>	Stinking goosefoot
<i>Chenopodium murale</i>	Nettle-leaved goosefoot
<i>Chenopodium schraderianum</i>	Schrader goosefoot
<i>Citrullus lanatus</i>	Wild watermelon
<i>Cleome gynandra</i>	Spider-wisp
<i>Cucumis myriocarpus</i>	Striped wild cucumber
<i>Datura ferox</i>	Large thorn apple
<i>Datura stramonium</i>	Thorn apple
<i>Flaveria bidentis</i>	Smelter's bush
<i>Galinsoga parviflora</i>	Gallant Soldier
<i>Gisekia pharnacioides</i>	Gisekia
<i>Helianthus annuus</i>	Sunflower (erratic control)
<i>Hibiscus trionum</i>	Bladder weed
<i>Ipomoea coscinosperma</i>	-
<i>Ipomoea purpurea</i>	Common morning glory
<i>Lepidium bonariense</i>	Pepperweed
<i>Mellilotus indica</i>	Annual yellow sweet clover
<i>Nicandra physalodes</i>	Apple of Peru
<i>Pentzia grandiflora</i>	Stinkweed
<i>Physalis angulata</i>	Wild gooseberry
<i>Richardia brasiliensis</i>	Tropical Richardia
<i>Ricinus communis</i>	Castor-oil plant
<i>Schkuhria pinnata</i>	Dwarf marigold
<i>Senecio burchellii</i>	Moltene disease senecio
<i>Sesamum triphyllum</i>	Wild sesame
<i>Sida cordifolia</i>	Heartleaf Sida
<i>Solanum nigrum</i>	Black nightshade
<i>Sonchus oleraceus</i>	Sowthistle
<i>Tagetes minuta</i>	Khakiweed
<i>Vicia hirsute</i>	Tiny purple vetch
<i>Vicia sativa</i>	Broad-leaved purple vetch
<i>Xanthium spinosum</i>	Spiny cocklebur
<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.

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

WAARSKUWINGS:

Gevaarstellings: Vlambare vloeistof en damp. Giftig indien ingesluk. Kan skadelik wees in kontak met die vel. Veroorsaak velirritasie. Kan 'n allergiese velreaksie veroorsaak. Veroorsaak ernstige oogskade. Word daarvan verdinck dat dit vrugbaarheid of die ongebore kind beskadig. Mag skade aan organe veroorsaak deur langdurige of herhaalde blootstelling. Baie giftig vir waterlewe met langdurige effekte.

VOOR-OES-INTERVAL:

- Laat die volgende wagperiodes toe tussen bespuiting en voer of beweiding.

Gars, Hawer, Koring en Lusern 40 dae
Mielies..... 14 dae

- Hanteer versigtig.
- Hou buite bereik van kinders, oningeligte 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 fitotoksiteit in die vorm van oesverlagings, onder normale groeitoestande 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 versium 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:

Voorsorgstellings

Algemeen: Indien mediese advies benodig word, hou produkhouer of etiket byderhand. Hou buite bereik van kinders. Lees etiket voor gebruik.

Voorkoming: Kry spesiale instruksies voor gebruik. Moet nie hanteer voordat alle veiligheidsmaatreëls gelees en verstaan is nie. Hou weg van hitte, warm oppervlaktes, vonke, oop vlamme en ander ontstekingsbronne. Geen rook nie. Hou die houder dig toe. Grond en bind houer en ontvangtoerusting. Gebruik ontploffingsvaste toerusting. Gebruik gereedskap wat nie vonkel nie. Neem aksie om statiese ontladings te voorkom. Moenie dampe inasem nie, spuit. Was hande, voorarms en gesig deeglik na hantering. Moet nie eet, drink of rook wanneer hierdie produk gebruik word nie. Gebruik slegs buite of in 'n goed geventileerde area. Besoedelde werksklere moet nie uit die werkplek toegelaat word nie. Vermy vrylating na die omgewing. Dra beskermende handskoene/ beskermende klere/oogbeskerming/gesigbeskerming. Dra asemhalingsbeskerming in geval van onvoldoende ventilasie.

Reaksie: INDIEN INGESLUK: Ontbied onmiddellik 'n gifsentrum of dokter. INDIEN OP DIE VEL: Was met baie water. Trek onmiddellik alle gekontameneerde klere uit. INDIEN INGESAEM: Verwyder persoon na vars lug en hou gemaklik om asem te haal. INDIEN IN OË: Spoel versigtig uit met water vir 'n paar minute. Verwyder kontaklense, indien teenwoordig en maklik om te doen. Gaan voort met spoel. INDIEN blootgestel of bekommerd: Kry mediese advies/aandag. Bel 'n gifsentrum of dokter as jy onwel voel. Kry mediese advies/aandag as jy onwel voel. Sploeflike behandeling is dringend (sien aanvullende noodhulpinstruksies op hierdie etiket). Indien velirritasie of uitslag voorkom: Kry mediese advies/aandag. Trek besoedelde klere uit en was dit voor hergebruik. In geval van brand: Gebruik D-poelie, koolstofdioksied (CO₂), alkoholbestande skuim om te blus. Versamel gemors.

Berging: Berg in 'n goed geventileerde plek. Hou die houder dig toe. Hou koel. Stoor toegesluit.

Wegdoening: Gooi inhoud en houer weg na 'n goedgekeurde afvalverwyderingsaanleg.

- 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.
- **SPOEL die leë houer DRIE KEER UIT soos volg:** Keer die leë houer om oor die spuit- of mengtenk en dreineer vir ten minste 30 sekondes nadat die vloeit drup verlangsamen het. Spoel die leë houer daarna drie keer agtereenvolgens uit met een kwart van die houervolume vars water en gooi die spoelwater in die spuit- of mengtenk. Prik die drievoudig uitgespoelde houer deur en gooi weg via 'n goedgekeurde versamelaar of herwinner (www.croplife.co.za). Moet nie die houer begrawe, verbrand of skenk aan enige ander partye wat dit as 'n houer vir kos of drank kan gebruik nie.
- Moenie die houer vir enige ander doel gebruik nie.

RELEVANTE STOWWE

NAAM	PRODUK IDENTIFISEERDER
Bromoksienil TS	CAS-Nr.: 1689-99-2
Oplosmiddel Nafta	CAS-Nr.: 64742-94-5
Kalsiumdodesielbenseensulfonaat	CAS-Nr.: 26264-06-2
Polioksietileen-fenieleter	CAS-Nr.: 9004-78-8

NOODHULPBEHANDELING:

Algemene advise: Verwyder besoedelde klere onmiddellik 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 minutes. 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 nooddulpbehandeling 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 bekamping van hipertermie ondersteun. Daar is geen spesifieke teenmiddel nie.

WEERSTANDSWAARSKUWING:

BROMOXYNIL 450 EC behoort aan die nitriel groep van onkruidodders. Die metode van werking van hierdie groep is die inhibering van fotosintese by fotosisteam II Groepkode 6 asook ont koppeling (membraanversteuring) Groepkode 24. As sulks word dit deur HRAC as Groepkodes 6 & 24 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 6 & 24 onkruidodder het. Indien hierdie onkruidodders herhaaldelik aangewend word, kan die weerstand biedende individue uiteindelik die onkruidpopulasie oorheers. Hierdie weerstand biedende onkruid sal moontlik nie deur **BROMOXYNIL 450 EC** of enige ander Groepkodes 6 & 24 onkruidodder, beheer word nie.

Aangesien die voorkoms van weerstand biedende onkruid moeilik is om te bepaal voor onkruidodderoediening plaasvind, is dit uiters noodsaaklik dat behandelde gebiede met gereelde intervalle ondersoek word om weerstand vroegetydig te identifiseer. Cedar Falls Properties (Edms) Bpk. sal nie verantwoordelikhed 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:

- Vermoed die eksklusiewe herhaaldelike gebruik van onkruidodders in dieselfde onkruidoddergroepekode. Wissel af met, of gebruik tenkingsels van produkte in verskillende onkruidoddergroepecodes.
- Integreer ander beheermaatreëls (chemies, verbouing, biologies) in onkruidbeheerprogramme.

Vir spesifieke inligting oor weerstandsbestuur, kontak die registrasiehouer.

WYSE VAN AKSIE: Selektiewe kontakkonruiddoder, geabsorbeer deur blare, beperkte translokasie.

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 BESTANDDELE 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)**

TOEDIENINGSMETODE

GRONDTOEDIENING: Vir toediening d.m.v. 'n trekkerspuit word aanbeveel dat 'n konvensionele spuitbalk met platwaaierspuitpunte 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 lspuitmengsel 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, geregistreerdvliegtuig volgens die instruksies van STANSA Kode 0118 (Aerial Application of Agricultural Pesticides) gedoen word. Dit is belangrik om te verseker dat die spuitmengsel 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 maontlike relatiewe span sal produseer.
- Al die spuitneuse/atomiseerders moet in die binneste 75 % van die vlerkspan geplaas word om die beweging van druppels in die vlerkvorteks 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 cm² 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 swaaihiogramter 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 inversie 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.
- Verky 'n versekering van die spuitoperateur dat aan die bogenoemde vereistes voldoen sal word.

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 spuitenk. 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.

GEWAS	DOSIS/HA	OPMERKINGS
Graangewasse: KORING, GARS & HAWER	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 MCPA (kalium sout)/ha	Verwys na Nota 7 vir tyd van toediening. Gebruik die hoër dosis MCPA slegs in die Oos Vrystaat wanneer <i>Polygonum aviculare</i> 'n probleem is.
LUSERN (ONDERGESAAI IN GRAAN GEWASSE)	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.
LUCERNE (GEVESTIG)	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.
MIELIES	0,75 - 1,0 ℓ/ha	Die toediening moet wees wanneer die onkruid ten vole vocrikom maar nie ouer as die 6-blaar stadium is nie (3-blaar stadium vir problem (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 'n skade aan die gewas kan veroorsaak of 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 hawer in die 5-blaarstadium. In die Winterreëvalgebied, 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 sommige 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 eenjarige breëblaaronkruid. 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

Acanthospermum hispidum
Galinosa parviflora
Amaranthus hybridus
Gisekia pharaceoides
A. spinosus
Helianthus annuus
A. thunbergii
Hibiscus trionum
Amsinckia calycina
Ipomoea coscinosperma

GEWONE NAAM

regopsterklits
knopkruid
gewone misbredie
Gisekia
doringmisbredie
sonneblom (wisselvallige beheer)
rooi misbredie
terblansbossie
vioolnek
-

<i>Anthemis cotula</i>	stink kamille
<i>I. purpurea</i>	purperwinde
<i>Arctotheca calendula</i>	soetgousblom
<i>Lepidium bonariense</i>	peperbossie
<i>Argemone subfusiformis</i>	witblom-bloudissel
<i>Melilotus 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>	kruihondebossie
<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. schradarianum</i>	vlooihondebossie
<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>	wildekommerr
<i>Tagetes minuta</i>	kakiebos
<i>Datura ferox</i>	grootstinkblaar
<i>Vicia hirsuta</i>	kleinperswieke
<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 **BROMOXNYL 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

Amaranthus deflexus
Raphanus raphanistrum
Cleome monophylla
Sisymbrium thellungii
Emex australis
Tribulus terrestris
Polygonum aviculare

NAAM GEWONE NAAM

meerjarige misbredie
ramenas
rusperbossie
gewone wildemosterd
Kaapse dubbeltjie
dubbeltjie
voëlduisendknoop



BROMOXYNIL 450 EC

Reg. No. / Nr L9620 Act No. 36 of 1947/ Wet Nr 36 van 1947

HERBICIDE



**READ THE LABEL AND ATTACHED PACKAGED LEAFLET BEFORE USE
KEEP OUT OF REACH OF CHILDREN AND ANIMALS**

HRAC HERBICIDE GROUP CODE

6/24

HRAC ONKRUIDDODER GROEP CODE:

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

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

ACTIVE INGREDIENT/AKTIEWE BESTANDEDEEL:

Bromoxynil (nitriële) (oktanoaat).....450 g/ℓ..... bromoksiniel (nitriël) (oktanoaat)



DANGER

Hazard Statements:

Flammable liquid and vapour.
Toxic if swallowed.
May be harmful in contact with skin.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
Suspected of damaging fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure.
Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
Do not breathe vapours, spray.
In case of inadequate ventilation wear respiratory protection.
IF SWALLOWED: Immediately call a poison centre or doctor.
IF ON SKIN: Wash with plenty of water.
Take off immediately all contaminated clothing.
IF IN EYES: Rinse cautiously with water for several minutes.
If skin irritation or rash occurs: Get medical advice/attention.
In case of fire: Use D-powder, carbon dioxide (CO₂), alcohol resistant foam to extinguish.

Batch No:

D.O.M:

D.O.E:

Net Contents:

See reverse of drum for details.

FOR FULL PARTICULARS SEE ATTACHED PAMPHLET.

VIR VOLLEDIGE BESONDERHEDE KYK AANGEHEGTE ETIKET.

UN No. / VR Nr: 1992



REGISTRATION HOLDER/ REGISTRASIEHOUER
Cedar Falls Properties 130 (Pty) Ltd
Reg. Nr.: Reg. 2006/031383/07
61 Marshall Drive, Old Mill Industrial Park,
Mount Edgecombe, South Africa, 4300
Tel: 031 003 3486

Poison Information Helpline (24 hrs): 0861 555 777



BARCODE

100302

165(H) x 140(W) mm

CYAN

MAG

YEL

BLK

100302