

# BROMOXY EC


**BEFORE USING THIS PRODUCT, READ THE LABEL CAREFULLY**

**GEBRUIKSAANWYSINGS INGESLUIT**  
Lotonummer  
Datum van vervaardiging

**VERWYS NA BESONDERHEDE**  
**SOOS OP HOUER / SAK GEDRUK**

## BROMOXY EC

HERBICIDE



Reg. No. L9115 Act/Wet No. 36 of/van 1947

2: 03/07/2018

**A selective emulsifiable concentrate herbicide for the post-emergence control of annual broadleaf weeds in the crops as listed.**

**'n Selektiewe emulgeerbare konsentraat onkruidodder vir die na-opkoms beheer van eenjarige breëblaaronkruid in gewasse soos aangedui.**


HRAC HERBICIDE GROUP CODE	C3	HRAC ONKRUIDDODER GROEPKODE
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ACTIVE INGREDIENT / AKTIEWE BESTANDEEL		
Bromoxynil (nitrile) (As the octanoate)	450 g/l	Bromoksinil (nitriël) (As die oktanoaat)


Registration Holder / Registrasiehouer  
**Meridian Agrochemical Company (Pty.) Ltd. / (Edms.) Bpk.**  
Reg. No. 2000/010819/07  
P.O. Box / Posbus 436, Modderfontein, 1645, South Africa / Suid-Afrika

20ℓ


UN Number: 3082







**HARMFUL / SKADELIK**



## WARNINGS

Withholding period:

Allow the following minimum number of days between application and feeding or grazing:

Wheat, Barley, Lucerne and Oats.....40 days  
Maize.....14 days

- Handle with care.
- Poisonous if swallowed, inhaled or if absorbed through the skin.
- Avoid skin and eye contact
- Toxic to fish, bees and wildlife.
- Do not use this product in any way contrary to the directions on this label, or excessive residues and other undesirable results may occur.
- Store under lock and key in a cool place away from food, feed, seed and other agricultural remedies.
- Keep out of reach of children, uninformed persons as well as animals.
- **FLAMMABLE** – Do not store or open container near open flame.
- In case of poisoning call a doctor and show him this label.
- **Re-entry** – Do not enter treated area within 1 day after application unless wearing protective clothing.
- **Aerial application:** Notify all inhabitants in the immediate vicinity of the area to be sprayed and issue the necessary warnings. Do not apply over water bodies and ensure that spray drift will not contaminate areas not under treatment.
- **BROMOXY EC** has been tested on most important commercial cultivars. More susceptible cultivars may be released in the future which need to be tested; for this, apply **BROMOXY EC** to a limited test area before commercial applications are made.

**Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be effective under all conditions. The activity 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 weed against the remedy, 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 by the user to follow the label instructions, or to the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.**

## PRECAUTIONS

- Do not inhale fumes or spray mist.
- Avoid skin and eye contact by wearing protective clothing when handling the concentrate and when preparing the spray mixture. When applying the spray mixture, wear respiratory protection, rubber gloves, overalls and boots
- In case of accidental eye contact, flush with plenty of water and get medical attention if necessary.
- Wash with soap and water after use and accidental skin contact as well as contaminated clothing.
- Do not eat, drink or smoke while mixing or applying the product or before washing hands and face.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean applicator and all measuring utensils thoroughly after use. Dispose of the rinsate where it will not contaminate crops, grazing, rivers, dams and boreholes.
- Do not use this product close to fish tanks, fish ponds and/or aquaria.
- Prevent contamination of food, feeds, drinking water and eating utensils.

- Invert the empty container over the spray 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 empty container three times with a volume of water equal to at least 30% of that of the container. Add the rinsate to the contents of the spray tank before destroying the container in the manner prescribed.
- Destroy the empty container by perforation and flattening and dispose of it in a safe manner such as by burying it at least 50 cm deep underground in an approved dump site and at least 100m away from a borehole or water source.
- **Do NOT burn the empty containers.**
- Do not use empty containers for any other purpose.

## SYMPTOMS OF HUMAN POISONING

**Eyes:** Moderately irritating to eyes.

**Skin:** May be mildly irritating to skin. Dermatitis may occur from repeated or prolonged skin contact.

**Ingestion:** Harmful if swallowed. Symptoms may include sweating, raised temperature, muscle rigidity.

**Inhalation:** Symptoms may include listlessness, raspy breath, and lung injury. High concentrations may have an anaesthetic effect.

## FIRST AID TREATMENT

**Skin contact:** Immediately remove contaminated clothing, shoes and leather goods. Gently wipe off excess chemical and flush body and clothes with large amounts of water and nonabrasive soap for at least 15-20 minutes. Wash contaminated clothing before re-use. Persons who become sensitised may require specialised medical management with anti-inflammatory agents. **Seek medical assistance immediately.**

**Eye contact:** Flush eyes with plenty of gently flowing cold water for at least 15 minutes holding eyelids open. Remove contact lenses. **Seek medical assistance immediately.**

**Inhalation:** Lie the patient down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear, apply resuscitation and administer oxygen. **Seek medical assistance immediately.**

**Ingestion: Do not induce vomiting. Get medical attention immediately** and make this container, label or material safety data sheet available. Never give anything by mouth to an unconscious person. For advice, contact the National Poisons Centre. If vomiting occurs, take precautions to ensure that the vomit is not swallowed. If the patient is conscious, have the patient rinse their mouth out thoroughly with water and give the patient water to drink. Remove the chemical by gastric lavage and catharsis and give oxygen if the patient's respiration is depressed. Only qualified personnel should administer gastric lavage or give oxygen.

## NOTE TO PHYSICIAN

No antidote is known. Treat symptomatically and supportively as and when needed. If the product is aspirated into the lungs during ingestion or vomiting, mild to severe chemical pneumonia may be caused. Gastric lavage or administration of activated charcoal with water may be indicated.

## MODE OF ACTION

**BROMOXY EC** is a post-emergent contact herbicide that has a short residual action.

**BROMOXY EC** is a member of the group code C3 nitrile herbicide group. The mode of action of this group of herbicides is the inhibition of photosynthesis II.

## RESISTANCE WARNING

For resistance management, **BROMOXY EC** is a group code C3 herbicide. Any weed population may contain individuals naturally resistant to **BROMOXY EC** and other group code herbicides. These resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds may not be controlled by **BROMOXY EC** or any other group code C3 herbicides.

### To delay herbicide resistance:

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

Since the occurrence of resistance cannot be forecast, users are advised to keep treated crops under close observation. If treatment is not effective following the use of **BROMOXY EC** as recommended, a resistant population may be present. If a resistant population is positively identified, consideration should be given to prompt use of a herbicide with a different mode of action for which there is no record of resistance from the relevant weed. For specific information on resistance management, contact the registration holder of this product. Meridian Agrochemical Company will not accept liability for performance failures in the event of a buildup of resistant weeds resulting from inadequate resistance management practices as indicated on the label.

## USE RESTRICTIONS

- Weeds must be adequately covered by the spray mixture in order to ensure acceptable control.
- Do not apply the **BROMOXY EC** when the weeds and crop are subject to moisture stress or any other physiological stress.
- Only apply when the crop and weeds are actively growing.
- Only weeds that have already emerged at the time of application will be controlled.
- Weeds should not have developed past the six-leaf stage at the time of application.
- Yellowing of Lucerne or some scorching of grain crops may occur following the application but yields should not be affected.
- Do not add a wetting agent to the spray mixture when Lucerne is treated.
- Do not apply **BROMOXY EC** when rain is expected within 12 hours following application.
- Irrigation should be withheld for 48 hours following **BROMOXY EC** application.
- Do not apply to any crop or situation not mentioned in this label.
- Do not apply this product in combination or tank mixture with any other product or agricultural remedy which is not specifically listed on this label. Meridian Agrochemical Company (Pty) Ltd accepts no responsibility for any negative effects experienced if the instructions on this label are not adhered to, unless a Meridian representative was consulted beforehand.
- Only apply **BROMOXY EC** using an accurate and safe application technique.

## DIRECTIONS FOR USE

Use only as directed.

## COMPATIBILITY

The compatibility of **BROMOXY EC** with other products depends on the formulations of the respective products as well as the quality of the spray water to be used. As formulations change from time to time it is recommended that a physical compatibility test be done prior to the tank mixture being made. **BROMOXY EC** is compatible with MCPA 750 DMAX (L 9020) and **FLICK-FLACK** (L 10154).

Do not use **BROMOXY EC** in tank mixture with parathion.

If **BROMOXY EC** is used in tank mixture with other agricultural remedies, consult the respective labels of those particular products.

## **MIXING INSTRUCTIONS**

Half-fill the spray tank with clean water.

If **BROMOXY EC** is to be used on its own, measure the required quantity of **BROMOXY EC** and pre-mix with at least 10 l water. Add this mixture to the water that is already in the spray tank and agitate.

When **BROMOXY EC** is to be mixed with any other product, note must be taken of the compatibility of **BROMOXY EC** with other agricultural remedies mentioned above and of the respective label recommendations of the mix partners.

Mix the formulated products in the following sequence:

Wettable powder – suspension concentrate – emulsifiable concentrate, as applicable.

Fill the spray tank with clean water to the desired level while maintaining agitation in order to ensure thorough mixing of the spray mixture before spraying commences. If any other product is to be mixed with **BROMOXY EC**, pre-mix the required volume of that product in the same way and slowly add it to the contents of the spray tank. Then add the required volume of **BROMOXY EC** just before the tank is filled to full capacity.

Constant agitation must be maintained during mixing and spraying of the product. **Tank mixtures must be sprayed out immediately and not allowed to stand in the spray tank overnight.** Spraying equipment must be thoroughly flushed out at the end of the spraying operation.

## **APPLICATION METHODS**

Ensure that the equipment is correctly calibrated and is checked regularly during application to ensure even and accurate application.

Only apply **BROMOXY EC** to actively growing young weeds (i.e. weeds growing in moist soil). It is important that all parts of the weed are thoroughly covered by the spray mixture in order to ensure adequate control. To achieve this, the following application instructions must be followed:

### **Ground application:**

- For application using a tractor sprayer, a conventional spray boom with flat fan nozzles is recommended.
- A low spray pressure (100-300 kPa) is recommended so that **BROMOXY EC** is applied as a coarse droplet spray.
- **Do not apply under high pressure.**
- Use no less than 200 l of spray mixture per hectare in order to ensure thorough weed coverage.

## **AERIAL APPLICATION**

Aerial application may only be done by a registered aerial application operator using a registered and correctly calibrated aircraft according to the instructions of SANS Code 10118 (Aerial Application of Agricultural Remedies). It is important to ensure that the spray mixture is distributed evenly over the target area and that the loss of spray material during application is restricted to a minimum. It is therefore essential that the following criteria be met;

### **Equipment**

- Use suitable atomising equipment that will produce the desired droplet size and coverage of the target area and will ensure the minimum loss of product through drift.
- The operator must use a nozzle set-up that will produce a droplet spectrum with the lowest possible relative span.
- All nozzles and 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 ha is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy nor be held responsible for any adverse effects if this product is applied aerially at a lower volume rate than recommended.
- A droplet coverage of 35 – 40 droplets per sq cm 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, with a VMD less than 150 microns, is restricted to a minimum.
- The height of the spray boom should be maintained at between 3 and 4m above the target.
- Do not spray when the aircraft is in a climb, at the top of a turn or during a dive or when banking.
- Apply before the crop becomes too dense as this will prevent proper coverage of the weeds.

### **Meteorological Conditions**

- The difference between the wet and dry bulb readings, as determined using a whirling hygrometer, must not exceed 8 °C.
- Do not spray under turbulent, unstable conditions nor 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) and/or high humidity conditions as this may cause:
  - i. Reduced efficacy due to suspension and evaporation of small droplets in the air (Which leads to inadequate coverage).
  - ii. Damage to other sensitive crops and/or non-target areas through drifting of the spray cloud away from the targeted area.
- Do not spray when the wind speed exceeds 15 km per hour.

### **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.

## RECOMMENDATIONS

CROP	APPLICATION RATE/HA	REMARKS
Wheat, Barley , Oats	0.75 l - 1,0 l <b>BROMOXY EC</b>	Apply when the weeds are fully emerged, but no later than the 4- to 6-leaf stage ( <b>Note:</b> for <b>problem weeds</b> do not apply later than the 3-leaf stage). Use the lower dosage rate only for ground application and the higher dosage rate only for aerial application when weather conditions favour the active growth of weeds. Also take note of “ <b>Application Methods</b> ” above.
	0.75 l - 1.0 l <b>BROMOXY EC</b> + 267 ml - 530 ml <b>MCPA 750 DMAX</b>	Refer to bullet number 3 under “Notes” for application timing. Use the higher rate of <b>MCPA 750 DMAX</b> only in the Eastern Free State when <i>Polygonum aviculare</i> is a problem.
Wheat and Oats	50 ml <b>FLICKFLACK</b> + 350 ml <b>BROMOXY EC</b>	<b>Ground and Aerial application:</b>  Ensure that the information under “DIRECTIONS FOR USE” is adhered to. Apply between the 3 leaf and late tillering stage of the crop, when the weeds are in the seedling (2-4) leaf stage.
Wheat	0.75 l <b>BROMOXY EC</b> + 500 ml - 1 l <b>MCPA 750 DMAX</b>	Refer to notes below for the timing of the application: Use the higher rate of <b>MCPA 750 DMAX</b> in the eastern Orange Free State when <i>Polygonum aviculare</i> is a problem. Spray by ground or aerial application. Also note “ <b>Application Methods</b> ” above, as well as “ <b>Notes</b> ” below.
<b>Lucerne</b> Under sown in grain crops	0.75 l - 1,0 l <b>BROMOXY EC</b>	Follow the instructions given above for wheat, barley and oats but <b>do not</b> apply in mixture with <b>MCPA 750 DMAX</b> , where the lucerne is younger than the second trifoliolate leaf stage or where clovers have been under sown with lucerne.
<b>Lucerne</b> Established	1.0 l - 1,5 l <b>BROMOXY EC</b>	Apply after cutting the lucerne and after the weeds are fully germinated, but no later than the 4 to 6 leaf stages ( <b>Note:</b> for <b>problem weeds</b> do not apply later than the 3 leaf stage). Use the higher dosage rate for aerial application, when the weed growth is very dense. Use the lower dosage rate for ground application only. Apply when weather conditions are favourable for active weed growth.
<b>Maize</b>	0.75 l - 1,0 l <b>BROMOXY EC</b>	Apply when the weeds are fully emerged but not older than the 6-leaf stage (3-leaf stage for problem weeds). Use the higher rate for aerial application.
	0.75 l - 1.0 l <b>BROMOXY EC</b> + 267 ml - 530 ml <b>MCPA 750 DMAX</b>	Apply as a ground or aerial spray when the weeds are fully emerged but not older than the 6-leaf stage. This treatment may be applied at any stage of the crop development from emergence to flowering. If the crop is taller than 40 cm, a directed spray is recommended in order to obtain better wetting of the weeds. Do not apply under cold, wet conditions and do not add foliar feeds to this mixture as this could lead to crop damage.

### NOTES:

- Do not apply **BROMOXY EC** when the weeds are older than as specified, as poor weed control will result.
- The use of **BROMOXY EC** in combination with wetting agents is not advisable, as this may lead to crop damage.
- When **MCPA 750 DMAX** is added, application must take place between growth stages 7 (centre double ridges enlarged) and 13 (awn of top spikelets enlarged), according to the list of growth stages for wheat drawn up by the Small Grain Institute, Bethlehem, and also when the weeds are fully germinated but no older than the 6 leaf stage. Apply to Barley when the plants are in the 5 to 7-leaf stage. In the Winter Rainfall Region, when **MCPA 750 DMAX** is added at 267 ml / ha, the mixture may be applied in small grains from the 3-leaf growth stage of the crop.
- Avoid application when the weeds are covered with heavy dew, or when a strong wind is blowing.
- Ensure thorough weed coverage.
- Weeds which have not germinated at application will not be controlled.
- Poor weed control may result if **BROMOXY EC** is applied when the weeds are under moisture stress or any other physiological stress.
- Apply **BROMOXY EC** only during favourable climate conditions when the weeds are actively growing.
- Under certain climatic conditions **BROMOXY EC** may cause some temporary leaf scorching or yellowing in Lucerne and grain crops, however, the yields should not be affected.
- On Wheat and Oats **FLICK-FLACK** may, under certain circumstances, cause leaf abscission and / or yellowing of the lower leaves. However, this will not have a negative impact on the crop yield.
- For maximum broadleaf weed control, apply **FLICK-FLACK** with **BROMOXY EC** to young weeds at the seedling stage but before they are beyond the 4 leaf stage. The weeds should be actively growing under moist conditions. Weeds which are growing under stress conditions may be less susceptible.
- When **BROMOXY EC** is mixed with any other product, the information on the respective label of that product must be carefully consulted and the **INSTRUCTIONS** adhered to. Consult your representative before mixing **BROMOXY EC** with other chemicals.

#### **WEED SPECIES NORMALLY CONTROLLED BY BROMOXY EC AND BROMOXY EC + MCPA 750 DMAX**

<b>Scientific name</b>	<b>Common name</b>
<i>Arctotheca calendula</i>	Cape marigold
<i>Chenopodium album</i>	White goosefoot
<i>Datura ferox</i>	Large thorn apple
<i>Emex australis</i> *	Spiny emex
<i>Lepidium bonariense</i>	Pepper cress
<i>Polygonum aviculare</i> *	Prostrate knotweed
<i>Raphanus raphanistrum</i> *	Wild radish
<i>Sonchus oleraceus</i>	Common sow thistle

#### **PROBLEM WEEDS:**

- (\*) Control is Erratic

#### **The following weeds will normally be controlled by FLICK-FLACK + BROMOXY EC:**

<b>Scientific name</b>	<b>Common name</b>
<i>Anagallis arvensis</i>	Pimpernel
<i>Arctotheca calendula</i>	Cape Marigold
<i>Emex australis</i> *	Spiny Emex



<i>Lupinus angustifolius</i>	Volunteer lupins
<i>Malva parviflora</i>	Small Mallow
<i>Polygonum aviculare</i>	Prostrate Knotweed
<i>Raphanus raphanistrum</i>	Wild radish
<i>Medicago</i> spp. / <i>Trifolium</i> spp.	Clovers
<i>Urtica urens</i>	Small Stinging Nettle

\*For the control of *Emex australis* use only ground application and NOT aerial application.

The **BROMOXY EC** treatments control the above mentioned weed species. Other weed species that were not present in the development trials of this product may also be controlled to a certain degree. The registration holder accepts no responsibility for unlisted weeds.

#### **ACKNOWLEDGEMENT OF TRADEMARKS**

MCPA 750 DMAX (L 9020)  
FLICK-FLACK (L10154)

Meridian Agrochemical Company (Pty) Ltd  
Meridian Agrochemical Company (Pty) Ltd

## WAARSKUWINGS

Onthoudingsperiode:

Laat die volgende minimum aantal dae toe tussen laaste toediening en voeding of beweiding:

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

- Hanteer versigtig.
- Giftig indien ingesluk, ingeasem of as deur die vel geabsorbeer word.
- Vermoeg oogkontak
- Giftig vir visse, bye en wildlewe.
- Moenie hierdie produk in enige manier wat teenstrydig is met die aanwysings op hierdie etiket gebruik nie, want oormatige residue en ander ongewenste resultate mag voorkom.
- Berg agter slot-en-grendel in 'n koel plek weg van voedsel, voer, saad en ander landboumiddels.
- Hou buite bereik van kinders, oningeligte persone en diere.
- **VLAMBAAR** - moenie stoor of die houder naby 'n oopvlam oopmaak nie.
- In die geval van vergiftiging ontbied 'n geneesheer en stel hierdie etiket aan hom/haar beskikbaar.
- **Herbetreding** - Moenie behandelde gebied binne 1 dag na bespuiting betree nie, tensy beskermende oorklere gedra word.
- **Lugtoediening:** Stel alle inwoners in die onmiddellike omgewing van die gebied wat behandel gaan word in kennis en reik die nodige waarskuwings uit. Moenie oor aangrensende gebiede of waterbronne bespuit nie of toelaat dat die spuitnewel daarheen oorwaai nie.
- **BROMOXY EC** is sonder enige fitotoksiseitskade op die mees belangrikste kommersiële kultivars getoets. Meer vatbare kultivars mag in die toekomst vrygestel word wat eers getoets moet word; hiervoor moet **BROMOXY EC** eers op 'n klein toetsoppervlakte aangewend word, voordat groot kommersiële bespuitings gemaak word.

**Alhoewel hierdie middel omvattend onder 'n groot verskeidenheid toestande getoets is, waarborg die registrasiehouer nie dat dit onder alle toestande doeltreffend sal wees nie. Die werking en effek daarvan kan beïnvloed 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 onkruid teen die betrokke middel, sowel as die metode, tyd en akkuraatheid van toediening. Verder aanvaar die registrasiehouer nie verantwoordelikheid vir skade aan gewasse, plantegroei, die omgewing of vir nadelige effek op mens of dier of vir 'n gebrek aan prestasie van die betrokke middel as gevolg van die versuim deur die gebruiker om die etiketaanwysings na te kom, of as gevolg van die ontstaan van toestande wat nie kragtens die registrasie voorsien kon word nie. Raadpleeg die verskaffer in die geval van enige onsekerheid.**

## VOORSORGMATREËLS

- Moet nie dampe of spuitnewel inasem nie.
- Vermoeg kontak met die vel en oë deur beskermende oorklere te dra wanneer die konsentraat hanteer of toegedien word. Dra respiratoriese beskerming, rubber handskoene, oorpak en stewels terwyl die spuitmengsel toegedien word.
- In die geval van oogkontak, spoel uit met baie water en kry mediese aandag indien nodig.
- Was met seep en water na gebruik en na toevallige velkontak; so ook die besoedelde klere.
- Moet nie eet, drink of rook tydens vermenging of toediening van die produk of voordat hande en gesig gewas is nie.
- Verhoed die wegdrywing van die spuitnewel na ander gewasse, weidings, riviere, damme en gebiede wat nie onder behandeling is nie.

- Maak toedieningsapparaat en alle meettoerusting deeglik skoon na gebruik. Raak ontslae van die spoelwater waar dit nie gewasse, weiding, riviere, damme en boorgate sal besoedel nie.
- Moenie hierdie produk naby vistenks, visdamme en/of akwariums gebruik nie.
- Verhoed besoedeling van voedsel, voer, drinkwater en eetgerei.
- Keer die leë houër om oor die spuittenk of mengbak en dreineer vir minstens 30 sekondes nadat die vloei tot 'n drup verminder het. Spoel die leë houër daarna **drie keer** uit met 'n volume water gelyk aan ten minste 30% van die inhoud van die houër. Gooi die spoelwater by die inhoud van die spuittenk voordat die houër op die voorgeskrewe wyse vernietig word.
- Vernietig die leë houër deur gate daarin te maak en plat te slaan en daarmee op 'n veilige wyse weg te doen soos deur dit minstens 50 cm diep onder die grond in 'n goedgekeurde stortingsterrein te begrawe en minstens 100m weg van 'n boorgat of waterbron.
- Moenie die leë houër verbrand nie.
- Moenie leë houers vir enige ander doel gebruik nie.

### **SIMPTOME VAN MENSLIKE VERGIFTIGING**

**Oë:** Mag matige oogirritasie veroorsaak.

**Vel:** Mag matige velirritasie veroorsaak. Die herhaalde of langdurige kontak met die vel mag dermatitis veroorsaak.

**Ingesluk:** Skadelik indien ingesluk. Simptome sluit in sweet, koors, spierrigiditeit. **Inaseming:** Simptome mag lusteloosheid, huigende asem, en longbesering insluit. Hoë konsentrasies mag 'n pynstillende effek hê.

### **NOODHULPBEHANDELING**

**Velkontak:** Verwyder onmiddellik besoedelde klere, skoene en leergoedere. Vee oortollige chemikalieë versigtig af en spoel die liggaam en klere met groot hoeveelhede water en was met nie-skurende seep vir ten minste 15-20 minute. Was besoedelde klere voor hergebruik. Persone wat gesensiteer raak, mag gespesialiseerde mediese bestuur met anti-inflammatoriese middels vereis. **Ontbied onmiddellik mediese hulp.**

**Oogkontak:** Spoel oë met baie stadig vloeiende koue water vir ten minste 15 minute en hou die ooglede oop. Verwyder kontaklense. **Ontbied onmiddellik mediese hulp.**

**Inaseming:** Lê die pasiënt neer en hou hom warm en rustig. Indien asemhaling vlak is of gestop het verseker dat die lugweg oop is, en pas kunsmatige asemhaling toe en dien suurstof toe.

**Ontbied onmiddellik mediese hulp.**

**Ingesluk: Moenie braking induseer nie. Ontbied onmiddellik mediese hulp** en stel hierdie houër, die etiket of die materiaalveiligheids-gegewensblad beskikbaar. Moet nooit iets per mond aan 'n bewustelose persoon toedien nie. Vir advies, kontak die Nasionale Gifstowwe Sentrum. Indien braking voorkom, tref voorsorg om te verseker dat die braaksel nie ingesluk word nie. Indien die pasiënt by sy bewussyn is, spoel sy/haar mond deeglik uit met water en gee die pasiënt water om te drink. Verwyder die chemikalieë deur maagspoeling en purgeermiddels en dien suurstof toe indien die pasiënt se asemhaling swak word. Slegs opgeleide personeel behoort maagspoeling te doen of suurstof te gee.

### **NOTA AAN GENEESHEER**

Geen teenmiddel is bekend nie. Behandel simptome en ondersteunend wanneer dit nodig is. Indien die produk in die longe tydens inname of braking ingeneem word, kan matige tot ernstige chemiese longontsteking veroorsaak word. Maagspoeling of die toediening van geaktiveerde houtskool met water kan gedoen word.

### **METODE VAN WERKING**

**BROMOXY EC** is 'n na-opkoms kontak onkruidodder wat 'n kort nawerking het. **BROMOXY EC** is 'n lid van die groepkode C3 nitriel onkruidoddergroep. Die metode van werking van hierdie groep van onkruidodders is die inhibisie van fotosintese II.

## WEERSTANDSWAARSKUWING

Vir weerstandbestuur is **BROMOXY EC** 'n groepkode C3 onkruidodder. Enige populasie van 'n spesifieke onkruid mag individue insluit wat 'n natuurlike weerstand teen **BROMOXY EC** of enige ander groepkode C3 onkruidodders het. Hierdie weerstandbiedende individue kan uiteindelik die onkruidpopulasie oorheers as hierdie onkruidodders herhaaldelik aangewend word. Hierdie weerstandbiedende onkruid sal waarskynlik nie deur **BROMOXY EC** of enige ander groepkode C3 onkruidodder beheer word nie.

### Om weerstand teen onkruidodders te vertraag:

- Vermy die eksklusiewe en herhaaldelike gebruik van onkruidodders met dieselfde groepkode. Wissel af met, of gebruik tenkmengsels van, geregistreeerde produkte uit ander onkruidoddergroepkodes.
- Integreer ander beheermaatreëls (chemies, verbouing of biologiese) in onkruidbeheerprogramme.

Aangesien die voorkoms van weerstand nie voorspel kan word nie, word gebruikers aangeraai om behandelde gewasse noukeurig dop te hou. Indien die behandeling met **BROMOXY EC** soos aanbeveel nie doeltreffend was nie, mag 'n weerstandbiedende populasie teenwoordig wees. Indien 'n weerstandbiedende populasie positief geïdentifiseer word, moet daar onmiddellik oorweging geskenk word aan die gebruik van 'n onkruidodder met 'n ander metode van werking, waarvan daar geen rekord van weerstand teen die betrokke onkruid is nie. Vir spesifieke inligting oor weerstandbestuur kontak die registrasiehouer van hierdie produk. Meridian Agrochemical Company (Edms.) Bpk. sal nie aanspreeklikheid aanvaar vir enige gebrek aan prestasie in die geval van die opbou van weerstandbiedende onkruid as gevolg van onvoldoende weerstandbestuurspraktyke soos aangedui op die etiket nie.

## GEBRUIKSBEPERKINGS

- Onkruid moet deeglik met die spuitmengsel bedek word om aanvaarbare beheer te verseker.
- Moenie **BROMOXY EC** toedien wanneer die onkruid en gewas onderhewig is aan vogstremming of enige ander fisiologiese stres nie.
- Dien slegs toe wanneer die gewas en onkruid aktief groeiend is.
- Slegs onkruid wat alreeds opgekom het ten tye van toediening, sal beheer word.
- Onkruid moet nie verder as die ses-blaarstadium ontwikkel wees teen die tyd van die toediening nie.
- Vergeling van Lusern of skroei van graangewasse mag voorkom na aanleiding van die toediening, maar opbrengste behoort nie geaffekteer te word nie.
- Moenie 'n benattingsmiddel by die spuitmengsel gebruik wanneer Lusern behandel word nie.
- Moenie **BROMOXY EC** toedien wanneer reën binne 12 uur na toediening verwag word nie.
- Besproeiing moet vir 48 uur na 'n **BROMOXY EC** toediening teruggehou word.
- Moenie op enige gewas of situasie aanwend wat nie op hierdie etiket verskyn nie. Moet nie hierdie produk in kombinasie of tenkmengsel met enige ander produk of landboumiddel gebruik wat nie spesifiek op hierdie etiket gelys is nie. Meridian Agrochemical Company (Edms.) Bpk. aanvaar geen verantwoordelikheid vir enige negatiewe gevolge indien die instruksies op die etiket nie nagekom word nie, tensy 'n Meridian verteenwoordiger vooraf geraadpleeg is.
- **BROMOXY EC** moet slegs met akkurate en veilige toedieningsapparate toegedien word.

## GEBRUIKSAANWYSINGS

Gebruik slegs soos aangedui.

## VERENIGBAARHEID

Die verenigbaarheid van **BROMOXY EC** met ander produkte hang van die formulering van die betrokke produkte af, asook van die kwaliteit van die spuitwater wat gebruik word. Deurdat formulering van tyd tot verander word dit aanbeveel om 'n fisiese verenigbaarheidstoets te doen voordat die tenkmengsel gemaak word. **BROMOXY EC** is verenigbaar met **MCPA 750 DMAX** (L 9020) en **FLICK-FLACK** (L 10154).

Moenie **BROMOXY EC** in 'n tenkmengsel met parathion gebruik nie. Indien **BROMOXY EC** in tenkmengsel met ander landboumiddels gebruik word, raadpleeg die onderskeie etikette van daardie spesifieke produkte.

## MENGINSTRUKSIES

Maak die spuittenk halfvol met skoon water.

As **BROMOXY EC** op sy eie gebruik word, meet die benodigde hoeveelheid **BROMOXY EC** uit en meng met ten minste 10 l water. Voeg hierdie mengsel by die water wat reeds in die spuittenk is terwyl dit geroer word.

Wanneer **BROMOXY EC** met enige ander produk gemeng word, moet kennis geneem word van die verenigbaarheid van **BROMOXY EC** met ander landboumiddels wat hierbo genoem is en die onderskeie etiketaanbevelings van die mengvennote.

Meng die geformuleerde produkte in die volgende volgorde:

Benatbare poeier - suspensie konsentraat - emulgeerbare konsentraat, soos toepaslik.

Vul die spuittenk met skoon water tot die verlangde vlak, terwyl roering gehandhaaf word om deeglike vermenging van die spuitmengsel te verseker voor die begin van die bespuiting. Indien enige ander produk met **BROMOXY EC** gemeng word, moet die benodigde volume van daardie produk op dieselfde manier gemeng word en voeg dit dan stadig by die inhoud van die spuittenk. Voeg dan die benodigde volume **BROMOXY EC** by net voordat die tenk tot volle kapasiteit gevul is.

Aanhoudende roering moet gehandhaaf word tydens vermenging en toediening van die produk. **Tenkmengsels moet onmiddellik uitgespuit word en nie toegelaat word om oornag in die spuittenk te staan nie.** Spuittoerusting moet deeglik uitgespoel word aan die einde van die toediening.

## TOEDIENINGSMETODES

Verseker dat die spuittoerusting korrek gekalibreer is en gereeld gedurende toediening nagegaan word om egalige en akkurate toediening te verseker. Dien **Bromoxy EC** slegs toe op aktief groeiende jong onkruid (dit is, onkruid wat in klam grond groei). Dit is belangrik dat alle dele van die onkruid deeglik deur die spuitmengsel bedek word om voldoende beheer te verseker. Om dit te bereik, moet die volgende toedieningsinstruksies gevolg word:

## GRONDTOEDIENING

- Vir toediening met behulp van 'n trekkerspuit word dit aanbeveel dat 'n konvensionele spuitbalk met platwaaierspuitpunte gebruik word.
- Gebruik 'n lae spuitdruk (100-300 kPa) sodat **BROMOXY EC** in die vorm van 'n growwe sproeidruppel aangewend word.
- Moet nie teen hoë druk aanwend nie.
- Moet nie minder as 200 l spuitmengsel per hektaar gebruik nie om deeglike onkruidbedekking te verseker.

## LUGTOEDIENING

Lugtoediening mag slegs deur 'n geregistreerde lugbespuitingsoperateur met 'n korrek gekalibreerde, geregistreerde vliegtuig volgens die instruksies van SANS Kode 10118 (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 verlies aan spuitmengsel tydens toediening tot 'n minimum beperk word. Dit is dus noodsaaklik om aan die volgende kriteria te voldoen;

### Toerusting

- Gebruik geskikte atomiseringsapparaat wat die vereiste druppelgrootte en bedekking van die teiken sal produseer, maar wat die minste verlies van produk deur wegdrywing sal verseker.
- Die operateur moet 'n spuitstelsel gebruik wat 'n druppelspektrum met die kleinste moontlike relatiewe span sal produseer.
- Al die spuitkoppe en atomiseerders moet in die binneste 75% van die vlerkspan geplaas word om die beweging van druppels binne-in die vlerkpuntvorteks in te verhoed.

### Toedieningsvereistes

- 'n Minimum volume van 40 l spuitmengsel per ha 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 effekte 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, die wat kleiner as 150 mikrons is, tot 'n minimum beperk word.
- Die hoogte van die spuitbalk moet tussen 3 en 4 meter bokant die teiken gehandhaaf word.
- Moet nie spuit wanneer die vliegtuig aan die bopunt van 'n draai, in 'n klim, of tydens 'n duik of terwyl dit uitklim nie.
- Dien toe voordat die gewas te ruig word aangesien dit behoorlike bedekking van die onkruid sal voorkom.

### Meteorologiese Toestande

- Die verskil tussen die nat-en droëbollesing, soos met 'n swaaihigrometer bepaal, moet nie 8 °C oorskry nie.
- Moenie tydens turbulente, onstabiele weerstoestande toedien of gedurende die hitte van die dag wanneer stygende en dalende konveksie windbeweging plaasvind nie.
- Moenie onder temperatuurinversie-toestande (deur bokant of binne-in die inversielaag te spuit) toedien nie. Hoë lugvogtoestande soos hierdie kan die volgende veroorsaak:
  - Verlaagde effektiwiteit as gevolg van die suspensie en verdamping van klein druppels in die lug (wat lei tot onvoldoende bedekking op teiken).
  - Skade aan ander sensitiewe gewasse en/of nie-teikenareas as gevolg van wegdrywing van die spuitwolk weg van die teikenarea.
- Moet nie spuit wanneer die windspoed 15 km per uur oorskry nie.

### Algemeen

- Verseker dat die lande akkuraat gemerk is en dat die lugbespuitingsoperateur presies weet watter lande bespuit moet word.
- Verkry 'n versekering van die lugbespuitingsoperateur dat aan bogenoemde vereistes voldoen sal word.

## AANBEVELINGS

GEWAS	DOSIS PER HEKTAAR	OPMERKINGS
Koring, Gars, Hawer	0.75 l - 1.0 l <b>BROMOXY EC</b>	Dien toe wanneer die onkruid volledig opgekom het, maar nie later as die 4 - tot 6-blaarstadium nie (3-blaarstadium vir probleemonkruid hieronder aangedui). Gebruik die laer dosis vir grondtoediening en die hoër dosis vir lugtoediening wanneer weerstoestande gunstig vir die aktiewe groei van onkruid is. Neem ook kennis van die " <b>Toedieningsmetodes</b> " hierbo.
	0.75 l - 1.0 l <b>BROMOXY EC</b> + 267 ml - 530 ml <b>MCPA 750 DMAX</b>	Verwys na aantekening 3 by "Notas" vir tyd van toediening. Gebruik die hoër dosis MCPA 750 DMAX slegs in die OosVrystaat waar <i>Polygonum aviculare</i> 'n probleem is.
Koring en Hawer	50 ml <b>FLICK-FLACK</b> + 350 ml <b>BROMOXY EC</b>	<b>Grond- en Lugtoediening:</b>  Verseker dat die inligting onder <b>GEBRUIKSAANWYSINGS</b> nagekom word. Dien toe tussen die 3-blaar en laatstoelstadium van die gewas, wanneer die onkruid nog in die saailing (2-4 blaar) stadium is.
Koring	0.75 l <b>BROMOXY EC</b> + 500 ml - 1 l <b>MCPA 750 DMAX</b>	Verwys na die aantekeninge hieronder vir die tyd van toediening: Gebruik die hoër dosis van MCPA 750 DMAX in die Oos-Vrystaat wanneer <i>Polygonum aviculare</i> 'n probleem is. Spuit deur grond- of lugtoediening. Neem ook kennis van die " <b>Toedieningsmetodes</b> " hierbo, sowel as die " <b>Aantekeninge</b> " hieronder.
Lusern Ondergesaai graangewasse	0.75 l - 1,0 l <b>BROMOXY EC</b>	Volg die instruksies wat hierbo gegee is vir koring, gars en hawer, maar moenie in 'n mengsel met MCPA 750 DMAX toedien nie waar die lusern jonger as die tweede driebladstadium is, of waar klawers met lusern ondergesaai is nie.
Lusern Gevestig	1.0 – 1.5 l/ha <b>BROMOXY EC</b>	Dien toe nadat die lusern gesny is en nadat die onkruid volledig opgekom het, maar nie ouer as die 4 tot 6 blaarstadium <b>(Let wel: 3 blaarstadium vir probleemonkruid hieronder aangedui)</b> . Gebruik die hoër dosis vir lugtoediening, wanneer die onkruidstand baie dig is. Gebruik die laer dosis vir grondtoediening alleenlik. Dien toe wanneer die weerstoestande gunstig is vir aktiewe onkruidgroei.

<b>Mielies</b>	0.75 l - 1,0 l <b>BROMOXY</b>	Dien toe sodra onkruid ten volle ontkiem het, maar nie ouer as die 6blaarstadium (3 blaarstadium vir moeilike beheerbare onkruid). Gebruik die hoër dosis vir lugbespuiting.
	0.75 l - 1.0 l <b>BROMOXY EC</b> + 267 ml - 530 ml <b>MCPA 750 DMAX</b>	Dien toe as 'n grond- of lugbespuiting sodra die onkruid ten volle ontkiem het, maar nie ouer as die 6-blaarstadium nie. Hierdie behandeling kan enige tyd van die gewas se ontwikkeling geskied, van ontkieming tot blom. Indien die gewas hoër as 40 cm is, is 'n gerigte bespuiting beter, om beter benutting van die onkruid te verseker. Moenie onder koue, nat toestande toedien nie en ook nie saam met blaarvoedings nie, want dit mag tot gewasskade lei.

#### AANTEKENINGE

- **BROMOXY EC** moet nie toegedien word indien die onkruid ouer is as wat gespesifiseer is nie, aangesien dit sal lei tot swak onkruidbeheer.
- Die gebruik van **BROMOXY EC** in kombinasie met benattingsmiddels is nie raadsaam nie, aangesien dit kan lei tot gewasskade.
- Indien **MCPA 750 DMAX** bygevoeg word moet toediening op koring tussen groeistadia 7 (middelste dubbelriewe vergroot) en 13 (baard van boonste aartjies vergroot) plaasvind; volgens die lys van groeistadiums vir koring opgestel deur die Kleingraaninstituut, Bethlehem. Dien **BROMOXY EC / MCPA** mengsels tussen opkoms en die 6-blaarstadium toe. Dien toe op gars wanneer die plante tussen die 5 en 7-blaarstadium is. In die Winterreëvalarea wanneer **MCPA 750 DMAX** teen 267 ml / ha bygevoeg word, mag die mengsel in kleingraan vanaf die 3-blaarstadium van die gewas toegedien word.
- Vermoed toediening wanneer die onkruid bedek is met swaar dou, of wanneer 'n sterk wind waai.
- Verseker deeglike onkruidbedekking.
- Onkruid wat tydens bespuiting nog nie opgekom het nie, sal nie beheer word nie.
- Swak onkruidbeheer mag verkry word indien **BROMOXY EC** toegedien word wanneer die onkruid onder vogstremming of enige ander fisiologiese stres verkeer.
- Dien **BROMOXY EC** toe net onder gunstige toestande wanneer die onkruid aktief groei.
- Onder sekere klimaatstoestande kan **BROMOXY 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.
- By koring en hawer mag **FLICK-FLACK** onder sekere omstandighede blaarafsnyding en/of vergeling van die onderste blare veroorsaak. Dit sal egter nie 'n negatiewe invloed op die oesopbrengs hê nie.
- Vir maksimum breëblaar onkruidbeheer moet **FLICK-FLACK** saam met **BROMOXY EC** op jong onkruidsaailinge toegedien word, voordat hulle ouer as die 4blaarstadium word. Die onkruid moet aktief in klam toestande groei. Onkruid wat onder strestoestande verkeer sal minder vatbaar wees.
- Wanneer **BROMOXY EC** met enige ander produk gemeng word, moet die inligting op die betrokke produk se etiket noukeurig gelees word en die gebruiksaanwysings gevolg word. Raadpleeg u verteenwoordiger voor die vermenging van **BROMOXY EC** met ander chemikalieë.

#### ONKRUIDE WAT NORMAALWEG DEUR BROMOXY EC AND BROMOXY EC + MCPA 750 DMAX BEHEER SAL WORD.

Wetenskaplike naam	Gewone naam
<i>Arctotheca calendula</i>	Soetgousblom
<i>Chenopodium album</i>	Withondebossie



<i>Datura ferox</i>	Groot stinkblaar
<i>Emex australis</i> *	Kaapse dubbeltjie
<i>Lepidium bonariense</i>	Peperbossie
<i>Polygonum aviculare</i> *	Voëlduisendknoop
<i>Raphanus raphanistrum</i> *	Ramenas
<i>Sonchus oleraceus</i>	Sydissel

#### PROBLEEMONKRUIDE:

- (\*) Beheer is Wisselvallige

#### DIE VOLGENDE ONKRUIDE SAL NORMAALWEG MET FLICK-FLACK + BROMOXY EC BEHEER WORD:

Wetenskaplike naam	Gewone naam
<i>Anagallis arvensis</i>	Pimpernel (Blouselblommetjie)
<i>Arctotheca calendula</i>	Gousblom
<i>Emex australis</i> *	Kaapse duwweltjie
<i>Lupinus angustifolius</i>	Blou lupien
<i>Malva parviflora</i>	Kiesieblaar
<i>Polygonum aviculare</i>	Voëlduisendknoop
<i>Raphanus raphanistrum</i>	Ramenas
<i>Medicago</i> spp. / <i>Trifolium</i> spp.	Klawers
<i>Urtica urens</i>	Kleinbrandnetel

\* Vir die beheer van *Emex australis* gebruik die grondtoediening en nie die lugtoediening nie.

Die **BROMOXY EC** behandelings beheer die bogenoemde onkruidspesies. Sekere onkruid wat nie in die ontwikkelingsproewe van die produk teenwoordig was nie, mag dalk ook in 'n mate beheer word. Die registrasiehouer aanvaar geen verantwoordelikheid vir onkruid wat nie gelys is nie.

#### ERKENNING VAN HANDELSMERKE

MCPA 750 DMAX (L 9020)  
FLICK-FLACK (L10154)

Meridian Agrochemical Company (Edms.) Bpk.  
Meridian Agrochemical Company (Edms.) Bpk.