


BOKATOR

A pre-emergence herbicide for the control of annual broad leaved weeds and Cockspur Grass (*Echinochloa crus-galli*) in potatoes.

A suspension concentrate formulation containing 600 g/L aclonifen and 30 g/L diflufenican

GROUP	32 12	HERBICIDE
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 <p>WARNING</p>	<p><u>RISK AND SAFETY INFORMATION</u></p> <p>May cause an allergic skin reaction. Suspected of causing cancer. Very toxic to aquatic life with long lasting effects.</p> <p>Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapours/spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with plenty of soap and water. IF exposed or concerned: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Collect spillage. Store locked up. Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site, except for triple rinsed empty containers which can be disposed of as non-hazardous waste.</p> <p>To avoid risks to human health and the environment, comply with the instructions for use.</p> <p>Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.</p> <p>UFI: PYR0-C03V-C00R-DTE2 PCS 06908</p>
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IMPORTANT INFORMATION

FOR USE ONLY AS A PROFESSIONAL HERBICIDE

Crop	Maximum individual dose (L/ha)	Maximum number of applications	Maximum total dose (L/ha)	Latest time of Application
Potato (ware and seed)	1.9	1 per crop	1.9	Pre crop emergence* BBCH 00-08

* After final furrow formation, no later than one week pre-appearance of potato sprout

Other specific restrictions:

- Do not apply using handheld equipment

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE.

PROTECT FROM FROST

STORE IN A COOL, DRY PLACE.

FOR PROFESSIONAL USE ONLY

Emergency medical information: contact National Poisons Information Centre, Beaumont Hospital, Dublin, Ireland.

Telephone numbers:

01 809 2166 (8am to 10pm every day) for members of the public.

01 809 2566 or 01 837 9964 (24 hours) for healthcare professionals.

**Registration holder:
GLOBACHEM NV**

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Contents:

2 L – 20 Le

Batch No: see bottle

SAFETY PRECAUTIONS

OPERATOR PROTECTION

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES when handling the concentrate, when applying the product.

WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

AVOID CONTACT WITH SKIN.

WASH HANDS AND EXPOSED SKIN before eating and drinking and after work.

IF YOU FEEL UNWELL, seek medical advice.

ENVIRONMENTAL PROTECTION

Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads. To protect aquatic organisms, respect an unsprayed buffer zone of 20m to surface water bodies.

Extreme care must be taken to avoid spray drift onto non-crop plants outside of the target area.

STORAGE AND DISPOSAL

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP OUT OF REACH OF CHILDREN.

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.

RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of safely. This material and its container must be disposed of in a safe way.

DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

BOKATOR is a pre-emergence herbicide containing aclonifen and diflufenican for the control of annual broad-leaved weeds and Cockspur/Barnyard grass in potatoes.

Aclonifen belongs to the diphenylether family and provides selective weed control. Uptake of Aclonifen inhibits the carotenoid biosynthesis, causing leaf bleaching followed by necrosis. Diflufenican belongs to the pyridine-carboxamide family and is a residual and foliar herbicide. It is absorbed principally by the shoots of germinating seedlings, with limited translocation, also blocking the carotenoid biosynthesis.

BOKATOR is used pre-emergence of the crop. The surface of the soil should be evenly covered with the product, where its active substances (aclonifen and diflufenican) form an even film. Clumps on the surface of the soil significantly reduce the effectiveness of the product. To achieve the greatest effect the soil and furrows must be well prepared and sprayed with the herbicide appropriately.

BOKATOR gets into weeds through the cotyledons or the coleoptile (seedlings). BOKATOR does not stop the germination of weeds, but it affects sprouting weeds to a certain extent, which depends on the internal resources of the seeds, speed of growth of the weeds and volume of absorbed active substance. Typical symptoms of the BOKATOR effect are as follows: intensive colours and chlorosis appear on the tissues of young, emerging sprouts and shoots. Later, weeds stop growing and perish.

After pre-emergence application do not disrupt the herbicide layer. Any form of mechanical cultivation or disruption of the soil surface by any other method will reduce the level of weed control provided.

Follow normal drilling / planting and ensure the seed is well covered.

CROP SPECIFIC INFORMATION

Apply via tractor mounted/ trailed horizontal sprayer, in 150 to 300 litres of water per hectare as a MEDIUM spray (BCPC category).

Potatoes

BOKATOR may be used on all commercial varieties of potatoes.

Apply BOKATOR at a rate of 1.9 litres of product per hectare. Application must be pre-emergence of the crop and weeds.

Ridges should be well rounded with few clods. Cultivations should produce a soil tilth that requires no further improvement after planting. Cultivation after spraying will encourage weed germination and reduce the residual activity of BOKATOR. On mineral soils with a high organic matter content and on peaty or organic soils the residual activity of BOKATOR may be reduced.

Ensure BOKATOR is applied evenly overall to both sides of potato ridges.

Care must be taken to ensure that application takes place before crop emergence.

Only one application of BOKATOR should be made to the crop.

WEEDS CONTROLLED

BOKATOR is absorbed primarily through the shoot of emerging seedlings as they grow through the layer of herbicide applied pre-emergence to the soil surface.

Susceptible weeds can emerge, but these will become chlorotic, their growth will be retarded leading ultimately to death. After pre-emergence application do not disrupt the herbicide layer. Any form of mechanical cultivation or disruption of the soil surface by any other method will reduce the level of weed control provided.

The following annual weeds will be controlled by a pre-emergence application of BOKATOR:

	Susceptibility at 1.9 L/ha
Fat Hen	MS
Black Nightshade	MR
Cockspur/Barnyard Grass	MR

MS- Moderately Susceptible

MR – Moderately Resistant

As for other residual herbicides application to a fine, firm seedbed will optimise efficacy. Efficacy will be reduced where application is made to cloddy seedbeds or where there is disruption of the soil surface after application.

RESTRICTIONS

DO NOT disrupt the soil surface after application as this will reduce the level weed control provided.

Extreme care must be taken to avoid spray drift onto neighbouring crops.

DO NOT overlap spray swaths. BOKATOR may cause a decrease of the yield when overdosing or overlapping of spray swaths.

Transient phytotoxic effects can occur on treated crops, however without a negative effect on final yield when spray overlap is avoided.

Due to the risk of crop damage, it is not recommended to use the product on sand or light soils, or on soils with more than 10% organic matter.

Due to the risk of crop damage, do not apply if heavy rain is expected within 24 hours.

MIXING

Shake the container well before use. Half fill the spray tank with clean water, begin agitation and add the required amount of BOKATOR. Wash out the container and add the washings to the spray solution, before topping up with clean water.

Continue agitation until spraying is completed.

Do not leave the sprayer filled with the spray solution standing for long periods.

Wash out the sprayer thoroughly after use, using a wetting agent or proprietary tank cleaner.

SUCCEEDING CROPS

After failure of the potato crop, soybean, carrot, sunflower and field bean can be sown as following crop after superficial soil cultivation. All other crops can be grown when cultivation of the soil to a depth of at least 20 cm is taken into account.

Soil cultivation should be taken into account even after a normal harvest.

HERBICIDE RESISTANCE MANAGEMENT

When herbicides with the same mode of action are used repeatedly over several years in the same field, selection of resistant biotypes can take place. These can propagate and may become dominating. A weed species is considered to be resistant to a herbicide if it survives a correctly applied treatment at the recommended dose. A strategy for preventing and managing such resistance should be adopted. This should include integrating herbicides with a programme of cultural control measures. Guidelines have been produced by the Weed Resistance Action Group and copies are available from your distributor, crop adviser or product manufacturer.

CONDITIONS OF SUPPLY

All goods supplied by us are of high grade and we believe them to be suitable but, as we cannot exercise control over their storage, handling, mixing or use, or the weather conditions before, during or after application which may affect the performance of the goods, all conditions and warranties, statutory or otherwise, as to the quality or fitness for any purpose of our goods are excluded. No responsibility will be accepted by us or re-sellers for any failure in performance, damage or injury whatsoever arising from their storage, handling, application or use. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in the use of such goods.