



# Othello®

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## Herbicide

A contact and residual herbicide (including two sulfonylurea herbicides) for use as a post-crop emergence treatment for the control of a wide range of broad-leaved weeds and meadow-grasses in winter wheat.

**Invert pack repeatedly and shake before use!**

## MAPP 16149

An oil dispersion formulation containing 7.5 g/L mesosulfuron-methyl (present as 7.8 g/L mesosulfuron-methyl-sodium, equivalent to 7.3 g/L mesosulfuron), 2.5 g/L iodosulfuron-methyl-sodium (equivalent to 2.3 g/L iodosulfuron) and 50 g/L diflufenican.

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

Bayer CropScience Limited  
230, Cambridge Science Park  
Milton Road, Cambridge CB4 0WB  
Telephone: 01223 226500

**For 24 hour emergency information contact Bayer CropScience Limited**  
Telephone: 00800 1020 3333

GB79419430r rA7c

# SAFETY PRECAUTIONS

## Operator Protection

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

**WEAR SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD)** when handling the concentrate.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

## Operator Protection (continued from front)

**WHEN USING DO NOT EAT, DRINK OR SMOKE.**

**IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY** with plenty of water and seek medical advice.

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

## Environmental Protection

**DO NOT CONTAMINATE WATER WITH THE PRODUCT OR ITS CONTAINER.**

Take extreme care to avoid drift onto crops and non-target plants outside the target area.

**DO NOT ALLOW DIRECT SPRAY** from horizontal boom sprayers to fall within 5 m of the top of the bank of a static



or flowing waterbody, unless a Local Environmental Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1 m of the top of a ditch which is dry at the time of application.

Aim spray away from water.

This product qualifies for inclusion within the Local Environment Risk Assessment for Pesticides (LERAP) scheme. Before each spraying operation from a horizontal boom sprayer, either a LERAP must be carried out in accordance with CRD published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for inspection for three years.

## Storage and Disposal

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

**KEEP OUT OF REACH OF CHILDREN.**

**KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.**

**WASH OUT CONTAINER THOROUGHLY** and dispose of safely.

**PROTECT FROM FROST.**



othellosds

To access the **Safety Data Sheet** for this product scan the code or use the link below:

[www.cropscience.bayer.co.uk/othellosds](http://www.cropscience.bayer.co.uk/othellosds)  
or alternatively contact your supplier



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### **Warning**

Causes serious eye irritation.

Very toxic to aquatic life with long lasting effects.

Wear protective gloves/protective clothing/eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

Collect spillage.

Contains fatty alcohol ethoxylate – alkyl ether.  
May produce an allergic reaction.

To avoid risks to human health and the environment, comply with the instructions for use.

### **IMPORTANT INFORMATION**

FOR USE ONLY AS AN AGRICULTURAL HERBICIDE

**Crops:** Winter wheat

**Maximum individual dose:** 1.0 L/ha

**Maximum number of treatments:** One per crop

**Latest time of application:**

Up to first node detectable stage (GS 31) of the crop

**READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.**

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### **Storage and Disposal**

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PROTECT FROM FROST.

## 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.

### RESTRICTIONS

DO NOT use Othello on crops undersown with grasses, clover or other legumes or any other broad-leaved crop.

Only one "ALS inhibiting" herbicide can be applied to the same crop in sequence or in tank-mixture with Othello. Refer to the table under **SEQUENCES & TANK MIXTURES** for details.

Othello must not be applied to any crop suffering from stress as a result of drought, waterlogging, pest or disease attack, nutrient deficiency, soil compaction or other factors reducing crop growth.

Because some non-target crops are sensitive to Othello, extreme care is required to avoid drift onto plants outside the target area, or onto ponds, waterways or ditches.

Application should not be made to frosted crops. Sharp or severe frosts following application may cause crop scorch from which the crop will normally recover.

Crop effects may be observed following treatment, particularly on spray overlaps and for late season/spring applications. These effects are transitory in nature and will normally have no adverse effect on grain yield.



## WEEDS CONTROLLED

Strains of some annual grasses (e.g. black-grass, wild-oats and Italian rye-grass) have developed resistance to herbicides which may lead to poor control. A strategy for preventing and managing resistance should be adopted. Guidelines have been produced by the Weed Resistance Action Group and copies are available from the HGCA, CPA, your distributor, crop advisor or product manufacturer.

<b>Weed</b>	<b>Susceptibility at 1.0 L/ha</b>
Annual meadow-grass	Susceptible post-emergence to GS 23
Rough-stalked meadow-grasses	Susceptible post-emergence to GS 23
Common chickweed	Susceptible post-emergence to branching stage (10 cm diameter.)
Mayweeds	Susceptible post-emergence to GS 18 (8 true leaves)
Common field speedwell	Susceptible post-emergence to GS 16 (6 true leaves)
Field pansy	Susceptible post-emergence to GS 16 (6 true leaves)
Common poppy	Susceptible post-emergence to GS 16 (6 true leaves). In mixed growth stage populations control of late growth stage plants may be incomplete.

Groundsel	Susceptible post-emergence to GS 14 (4 true leaves)
Red deadnettle	Susceptible post-emergence to GS 14 (4 true leaves)
Shepherd's purse	Susceptible post-emergence to GS 14 (4 true leaves)
Charlock	Susceptible post-emergence to GS 16 (6 true leaves)
Volunteer oilseed rape	Susceptible post-emergence to GS 16 (6 true leaves)
Cleavers	Moderately susceptible post-emergence to GS 12 (2nd whorl stage). Useful levels of control can be achieved, but a follow-up treatment with a specific cleaver herbicide may be required in some situations.

Othello is a highly active herbicide with foliar activity against meadow-grasses and a range of broad-leaved weeds. The actual time taken for herbicidal symptoms to appear and death varies between weed species, timing of application and weather conditions. In some cases symptoms may not be apparent for up to 4 weeks.

As Othello is active primarily via foliar uptake good spray coverage of the target weed is essential for optimal efficacy.

To reduce the risk of developing resistance or where resistance to ALS herbicides is suspected, applications should be made to young, actively growing weeds. Due to the risk of resistance development, Othello should not be used where annual grass weeds other than annual meadow-grass and rough-stalked meadow-grass are present. Always follow WRAG guidelines for preventing and managing herbicide resistant grass and broad-leaved weeds.

Do not use Othello as a stand-alone treatment for common chickweed or common poppy. Only use in a tank mixture or sequence with herbicides with non-ALS modes of action for the control of common chickweed or common poppy. Do not use Othello as the sole means of grass weed or broad-leaved weed control in successive crops. Always use grass and broad-leaved weed herbicides with non-ALS modes of action throughout the cropping rotation. Always monitor the effectiveness of weed control and investigate any odd patches of poor grass or broad-leaved weed.

## **CROP SPECIFIC INFORMATION**

### **Winter wheat**

Apply via a horizontal boom sprayer at a rate of 1.0 L/ha. Apply in 100-300 L/ha as a **FINE to MEDIUM** spray (BCPC category). Use application techniques which ensure good weed coverage and crop penetration, using flat fan nozzles. Ensure that spray swaths do not overlap. Always use Othello in mixture with authorised adjuvant Biopower (ADJ: 0617) at a rate of 1.0 L/ha.

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

For use on all varieties of winter wheat.

Apply from post-emergence of the crop up to first node detectable stage (GS 31).



## SEQUENCES AND TANK-MIXTURES

Only one “ALS inhibiting” herbicide can be applied to the same crop in sequence or in tank mixture with Othello. Othello may be applied to the same crop in sequence or in tank mixture with one of the following “ALS inhibiting” herbicides:

Alias SX	Finish SX	Omnera LQM
Ally Max SX	Galaxy	Presite SX
Answer SX	Gartrel	Provalia LQM
Avro SX	GF-184	Quantum SX
Barton WG	Gropper SX	Ratio SX
Biplay SX	Harmony M SX	Refine Max SX
Boxer	Hunter	Sekator OD
Calibre SX	Hussar*	Simba SX
Chekker	Inka SX	Slalom
Chimera SX	Jubilee SX	Spitfire
Cleancrop Mondial	Lorate	Starane XL
Concert SX	Mozaic SX	Traton SX
Dakota		
DP911 SX		
Eagle		

\* Up to 50 g/ha Hussar may be applied with Othello.

These sequences and tank mixtures must only be applied in accordance with label recommendations for every product in the sequence or tank mixture. Aside from those listed above, do not use in sequence or tank mixture with any other ALS inhibitors, such as sulfonylureas, unless specifically permitted on the label for either product.

As part of the Herbicide Resistance Management Strategy for Othello, do not apply Chekker or Sekator in sequence with Othello for the control of common chickweed or common poppy in order to avoid increased selection for herbicide resistant individuals. Do not tank mix with chlorpyrifos. Allow at least 14 days before or after chlorpyrifos treatments.

#### **FOLLOWING CROPS and CROP FAILURE**

Winter wheat, winter barley and winter oilseed rape may be sown in the year of harvest to succeed a winter wheat crop treated with Othello. Spring wheat, spring barley, spring oilseed rape and sugar beet may be drilled in the spring following harvest of the Othello treated winter wheat crop.

Prior to drilling winter or spring oilseed rape or sugar beet, plough or cultivate to 15 cm prior to drilling. Occasionally in oilseed rape crops some seedlings may show slight discolouration on the cotyledons. These effects are quickly outgrown and should not affect subsequent growth.

In the event of crop failure for any reason, soil treated with Othello can be re-drilled with winter wheat or spring wheat after normal cultivation. An interval of 6 weeks should elapse between treatment of the failed crop and drilling the replacement crop.

Where Othello is applied in sequence or tank mixture with Eagle, Chekker or Sekator only sow the winter wheat, winter barley, spring wheat, spring barley and sugar beet as following crops in the normal rotation. Where Othello is applied in sequence or tank mixture with other permitted "ALS inhibiting" herbicides, always follow the most restrictive label with regard to following crops.

## **MIXING**

Shake well before use. Add the recommended quantity of Othello to the spray tank half-filled with the required quantity of clean water. Add the remainder of the water with the sprayer agitation system in operation. Maintain agitation during mixing and loading and until spraying is complete. Do not leave the sprayer standing with chemical in it.

To avoid subsequent damage to crops other than winter wheat it is important that the spray tank, boom, hoses, filters and nozzles are thoroughly washed out to remove all traces of Othello immediately after spraying using a proprietary sprayer cleaner (e.g. All Clear Extra) according to the label instructions for that product.

Do not mix any bleach or chlorinating agent with any ammonia-based cleaning agent as toxic gases may be liberated.

® Othello, Eagle, Chekker and Sekator are registered Trade Marks of Bayer

All other brands listed may be Trade Marks of other manufacturers and proprietary rights may exist

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