

# Herbicide

A highly active herbicide (a combination of two sulfonvlurea herbicides) with foliar and some root activity against black-grass, wild oats, rve-grasses, meadow-grasses, common chickweed and mayweeds in winter wheat.

## MAPP 12478

A water dispersible granule formulation containing 30 g/kg mesosulfuron-methyl and 6 g/kg iodosulfuron-methyl-sodium 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: 0800 220876

### 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 CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the product.

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

WHEN USING DO NOT EAT, DRINK OR SMOKE WASH HANDS AND EXPOSED SKIN before eating and drinking and after work.

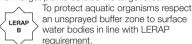
SAFETY PRECAUTIONS AND SAFETY DATA SHEET OR CODE CONTINUE WITHIN LABEL .

B79437145K

#### **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.



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

DO NOT ALLOW DIRECT SPRAY from

This product qualifies for inclusion within the Local Environment Risk Assessment for Pesticides (LERAP) scheme. Before each spraying operation from a horizontal boom sprayer and broadcast airassisted 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 to any person entitled to exercise enforcement powers under or in connection with the Food and Environment Protection Act (as amended). (An electronic record will satisfy the requirement for a written record, providing it is similarly available for inspection and can be copied).

## Storage and Disposal

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

KFFP OUT OF REACH OF CHILDREN.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.
WASH OUT CONTAINER THOROUGHLY and dispose of safely.

PROTECT FROM FROST



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

www.bayercropscience.co.uk/atlantiswgsds or alternatively contact your supplier

#### Safety Information

#### ATI ANTIS WG

A water dispersible granule formulation containing 30 g/kg mesosulfuron-methyl and 6 g/kg iodosulfuron-methyl-sodium.



#### Danger

Causes skin irritation

Causes serious eve damage

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 exposed or concerned: Call a POISON CENTRE or doctor/physician

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

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:

0.4 kg product/ha

Maximum number of treatments: One per crop

Latest time of application: Flag leaf ligule

One per crop Flag leaf ligule iust visible (GS 39

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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A highly active herbicide (a combination of two sulfonylurea herbicides) with foliar and some root activity against black-grass, wild oats, rye-grasses, meadow-grasses, common chickweed and mayweeds in winter wheat.

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## **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.



To protect aquatic organisms respect an unsprayed buffer zone to surface water water bodies in line with LERAP requirement.

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

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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

# **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 Atlantis WG on crops undersown with grasses, clover or other legumes or any other broadleaved crop.

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

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

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

Do not apply Atlantis WG when rain is imminent. Do not apply during periods of frosty weather.

Store in a safe dry place designated as an agrochemical store.

PROTECT FROM FROST

#### WEEDS CONTROLLED

This product contains mesosulfuron-methyl and iodosulfuron-methyl which are ALS inhibitors, also classified by the Herbicide Resistance Action Committee as 'Group B'. Use only as part of a resistance management strategy that includes cultural methods of control and does not use ALS inhibitors as the sole chemical method of grass-weed control. 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.

| Black-grass (sensitive)   | Post-emergence to GS 39                          |  |  |
|---|--|--|--|
| Black-grass (Resistant* - EMR)  | Post-emergence to GS 29                          |  |  |
| Wild oats   | Post-emergence to GS 29                          |  |  |
| Annual meadow-grass   | Post-emergence to GS 31                          |  |  |
| Rough-stalked meadow grass  | Post-emergence to GS 31                          |  |  |
| Perennial rye-grass (from seed)   | Post-emergence to GS 31                          |  |  |
| Italian rye-grass   | Post-emergence to GS 30                          |  |  |
| Common chickweed  | Post-emergence to GS 18 (8 expanded true leaves) |  |  |
| Mayweeds  | Post-emergence to GS 18 (8 expanded true leaves) |  |  |
| * Situations where Enhanced Metabolism Resistance (EMR) has been confirmed as RR or RRR by a resistance test or where a significant reduction in performance of other herbicides has been noted previously. |  |  |  |

Susceptibility

Weed

Atlantis WG is readily translocated within the target weed, inhibiting growth within hours of application. 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.

Optimum grass weed control will be obtained when all grass weeds are emerged at spraying. Weeds germinating after application will not be controlled. Due to the potential for yield loss without prior signs

Due to the potential for yield loss without prior signs of crop phytotoxicity, avoid use of Atlantis WG to control light infestations of grass weeds.

As Atlantis WG is active primarily via foliar uptake

good spray coverage of the target weed is essential

for optimal efficacy. For optimal activity, apply when

weather conditions promote active weed growth.
Atlantis WG controls emerged weeds on all soil types.
Atlantis WG has a moderate residual life in soil under normal conditions. As residual activity is important for optimal activity, avoid application under very dry conditions on to very dry soil. Residual efficacy will be

enhanced where seedbeds are fine and moist. High

soil temperatures and cloddy seedbeds may reduce

The presence of enhanced metabolism herbicide resistant populations of Italian rye-grass may lead to unacceptable levels of control. To reduce the risk of developing resistance or where resistance to sulfonylurea herbicides is suspected, applications

the residual efficacy of Atlantis WG.

should be made to young, actively growing weeds. Key aspects of the Atlantis WG resistance management strategy are:

- ALWAYS follow WRAG guidelines for preventing and managing herbicide resistant grass and broad-leaved
- weeds.

  DO NOT use Atlantis WG as a stand-alone treatment for black-grass, rye-grass or common chickweed. Use only in tank mixture or in sequence with perhicides with pon-ALS modes of action
- IDEALLY apply Atlantis WG as early as possible and before GS 31 of grass weeds.
   DO NOT use Atlantis WG as the sole means of grass weed or broad-leaved weed control in

the cropping rotation.

- successive crops.

   ALWAYS use grass and broad-leaved weed herbicides with non-ALS modes of action throughout
- ALWAYS monitor weed control effectiveness and investigate any odd patches of poor grass or broad-leaved weed control. If unexplained contact your agronomist who may consider a resistance test appropriate.

# CROP SPECIFIC INFORMATION Winter Wheat

Apply via a horizontal boom sprayer at a rate of 0.4 kg/ha. Apply in 100-300 L/ha as a **FINE** to **MEDIUN** 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 Atlantis WG in

mixture with authorised adjuvant Biopower (ADJ: 0617) at a rate of 1 L/ha.

Only one application of Atlantis WG should be made to the crop.

to the crop.

For use on all varieties of winter wheat. Apply from the 2 leaf stage (GS 12) of the crop up to flag leaf liqule just visible (GS 39).

#### **SEQUENCES & TANK-MIXTURES**

Only one "ALS inhibiting" herbicide can be applied to the same crop in sequence or in tank mixture with Atlantis WG.

Atlantis WG 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    | Oklar SX      |
|----------|----------------------|--------------|---------------|
| <b>M</b> | Ally Max SX          | Galaxy       | Omnera LQM    |
|          | Answer SX            | Gartrel      | Presite SX    |
|          | Avro SX              | GF-184       | Provalia LQM  |
|          | Barton WG            | Gropper SX   | Quantum SX    |
|          | Biplay SX            | Harmony M SX | Ratio SX      |
| е        | Boxer                | Hunter       | Refine Max SX |
|          | Calibre SX           | Hussar*      | Sekator OD    |
|          | Chekker              | Inka SX      | Simba SX      |
|          | Chimera SX           | Jubilee SX   | Slalom        |
| th       | Cleancrop<br>Mondial | Lorate       | Spitfire      |
|          | Concert SX           | Mozaic SX    | Starane XL    |
| ng       | Dakota               | Oriel 50SX   | Traton SX     |
|          | DP911 SX             |              |               |
|          | Eagle                |              |               |
|          |                      |              |               |

WG Atlantis WG may be applied to the same crop in sequence with one of the following "ALS inhibiting"

Ductis SX# Lexus SX# Absolute# Excalibur# Bullion# Exceed SX# Staka SX#

herbicides:

# To avoid increased selection of herbicide resistant black-grass, a sequence of Atlantis WG with one of these products is only permitted where the product containing flupyrsulfuron-methyl has been applied in tank-mix with a suitable residual partner e.g. pendimethalin and/or flufenacet based products

These sequences and tank mixtures must only be applied in accordance with label recommendations for every product in the sequence or tank mixture and only if used in conjunction with a robust non-

and before black-grass emergence.

\* Up to 50 g/ha Hussar may be applied with Atlantis ALS inhibitor autumn herbicide programme. This is particularly important where both components are applied in the spring. 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 Atlantis WG, do not apply Chekker or Sekator OD in sequence with Atlantis WG for the control of common chickweed in order to avoid increased selection for herbicide resistant individuals

# FOLLOWING CROPS and CROP FAILURE

Only winter wheat, winter barley or winter oilseed rape may be sown in the year of harvest to succeed a winter wheat crop treated with Atlantis WG. Spring wheat, spring barley, spring oilseed rape and sugar beet may be drilled in the spring following harvest of the Atlantis WG treated winter wheat crop. Plough prior to planting crops of oilseed rape, otherwise crop damage may occur. In the event of crop failure for any reason, sow only winter wheat in the same cropping season as an application of Atlantis WG. Where Atlantis WG 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
Add the recommended quantity of Atlantis WG 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 Atlantis WG immediately after spraying using a proprietary sprayer cleaner (e.g. All Clear Extra®) according to the label instructions for that product.

- ® Atlantis, biopower, Chekker, Eagle and Sekator are registered Trade Marks of Bayer
- © Bayer CropScience Limited 2017

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