

# AZOXYSTAR MAPP 17407

A SUSPENSION CONCENTRATE CONTAINING 250 G/L AZOXYSTROBIN  
AZOXYSTAR IS A BROAD-SPECTRUM FUNGICIDE WITH TRANSLAMINAR, SYSTEMIC AND PROTECTANT ACTIVITY.



**WARNING**

**VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.**  
KEEP OUT OF REACH OF CHILDREN  
DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT  
COLLECT SPILLAGE.  
DISPOSE OF CONTENTS/CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT.  
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 AVOID RISKS TO HUMAN HEALTH AND THE ENVIRONMENT, COMPLY WITH THE INSTRUCTIONS FOR USE.**

**IMPORTANT INFORMATION: FOR USE ONLY AS A PROFESSIONAL AGRICULTURAL/HORTICULTURAL FUNGICIDE**

Crops	Maximum individual dose (Litres Product/ha)	Maximum number of treatments	Minimum spray interval (days)	Latest time of application
Wheat, rye and triticale	1.0 L/ha	Two per crop	14	Before watery-ripe stage (GS71).
Barley, oats	1.0 L/ha	Two per crop	14	Before beginning of flowering (GS61).
Winter and spring oilseed rape	1.0 L/ha	Two per crop	21	21 days before harvest.
Combining peas	1.0 L/ha	Two per crop	14	35 days before harvest.
Vining peas	1.0 L/ha	Two per crop	14	14 days before harvest.
Bulb onions	1.0 L/ha	Three per crop	7	14 days before harvest.
Leeks	1.0 L/ha	Three per crop	12	21 days before harvest
Carrots	1.0 L/ha	Three per crop	7	14 days before harvest
Asparagus (outdoor)	1.0 L/ha	Two per crop	10	Before senescence
Field beans	1.0 L/ha	Two per crop	21	35 days before harvest
Outdoor crops of Brussels sprouts, cabbage, cauliflower, kale (winter greens), collards (spring greens), broccolini, calabrese**	1.0 L/ha	Two per crop	12	14 days before harvest
Potatoes (Foliar spray)	0.5 L/ha	Three per crop (if disease pressure remains high)	7	7 days before harvest
Potatoes (In furrow)	3.0 L/ha	One per crop	-	At planting in the furrow

**Other specific restrictions:** To reduce the risk of resistance developing in target diseases the total number of applications of product containing DoI fungicides made to any cereal crop must not exceed two. When used in a protected situation other than 'permanent protection with full enclosure', aquatic buffer zones in line with LEHAP requirements must be observed.

\*\*A maximum total dose of 500g azoxystrobin must not be exceeded within a 12 month period on the same field.

This product must not be applied via hand-held equipment.

Non-returnable containers must not be re-used for any purpose

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

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LABEL VERSION AZOXY/UK/V8

**TRANSPORT INFORMATION: UN No.:** 3082, **Class:** 9, **Packaging Group:** III, Marine pollutant

THE CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH (COSHH) REGULATIONS MAY APPLY TO THE USE OF THIS PRODUCT AT WORK. FOR 24 HOUR EMERGENCY INFORMATION CONTACT NHS 111

**PROTECT FROM FROST    MADE IN EU    SHAKE WELL BEFORE USE    BATCH NO. SEE PACKAGING    NET CONTENTS: 5 LITRES** e

## SAFETY PRECAUTIONS

### Operator Protection

WASH SPLASHES from skin or eyes immediately.  
DO NOT BREATHE SPRAY.  
WASH HANDS AND EXPOSED SKIN before meals and after work.  
WHEN USING DO NOT EAT, DRINK OR SMOKE  
IF YOU FEEL UNWELL, seek medical advice (show label where possible).

### Environmental Protection

AVOID DRIFT onto non-target plants.  
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 to surface water bodies in line with LERAP requirements.

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 water body, unless a Local Environment 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.

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's published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for three years.

### Storage and Disposal

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.  
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.  
KEEP OUT OF REACH OF CHILDREN  
DO NOT RE-USE CONTAINER for any purpose

### DIRECTIONS FOR USE

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

AZOXYSTAR is a systemic translaminar and protectant strobilurin fungicide and belongs to the Qo1 group of fungicides (FRAC mode of action code 11). It inhibits fungal respiration and, to protect against the development of resistance, should always be used in mixture or programmes with other fungicides with different modes of action. In addition to disease control, it can maintain green leaf area in crops longer than untreated crops and this can also lead to significant yield benefits. Applied as a preventative treatment when predictive tools indicate the likelihood of disease development or at the first sign of disease in the crop, it gives 4 – 6 weeks protection against susceptible diseases when applied to cereals at the stem elongation stage. Persistence may be even longer when applied to the flag leaf or the ear.

Best results will be achieved from applications made as a protectant treatment following a disease risk assessment or the use of appropriate decision support systems. For optimum disease control apply before infection or as soon as disease is first seen in the crop.

## RESTRICTIONS

On cereal crops, AZOXYSTAR must always be used in mixture with another product, recommended for control of the same target disease that contains a fungicide from a different cross resistance group and is applied at a dose that will give robust control.

Do not treat crops under stress as this may give less reliable results. Possible causes of crop stress include poor soil or cultural conditions, adverse climatic conditions, water-logging or drought, pest or disease attack and nutrient deficiency. Apply under good growing conditions with adequate soil moisture.

Consult processor before treating crops destined for processing.

Certain apple varieties are highly sensitive to AZOXYSTAR. As a precaution AZOXYSTAR should not be applied when there is a risk of spray drift onto neighbouring apple crops. Spray equipment used to apply AZOXYSTAR to other crops should not be used to treat apples.

## CROP SPECIFIC INFORMATION

**1. Winter and spring oilseed rape:** Two applications of 1.0 L/ha are permitted in oilseed rape between BBCH60-69 with the last application at least 21 days before harvest. A second treatment may be required if disease pressure remains high.

Application should be made using a MEDIUM quality spray as defined by BBCC in a minimum of 200 L/ha. Where crops are dense the water volume should be increased to 250-300 L/ha. AZOXYSTAR will control the following diseases in oilseed rape crops:

Crop	Disease		Level of control expected
Oilseed rape (winter and spring)	Leaf and pod spot	<i>Alternaria</i> spp.	Control – apply as a protectant spray when first 10 pods exceed 4 cms, before they become knobbly and not later than the time the first spots are seen on the pods.
	Sclerotinia stem rot	<i>Sclerotinia sclerotiorum</i>	Moderate control- apply as a protectant spray. Optimum timing is early to mid flowering (BBCH GS 60 – 65)*

\* application for *Sclerotinia* control will also limit the development of *Alternaria*.

### 2. Winter and spring wheat, winter and spring barley:

Two applications of 1.0 L/ha are permitted in wheat and barley. Application in wheat must be between BBCH 30-69 and before watery ripe stage (GS71) and application in barley must be between BBCH30-59 and before the beginning of flowering (GS61). For optimum activity against ear diseases application should be made at ear emergence while application at 1 – 2 nodes for control of foliar diseases can also reduce the severity of take-all infection

AZOXYSTAR will control the following diseases in wheat and barley crops:

Crop	Disease		Level of control expected
Wheat (winter or spring)	Glume blotch	<i>Septoria nodorum</i>	Control
	Yellow rust	<i>Puccinia striiformis</i>	Control
	Brown rust	<i>Puccinia recondita</i>	Control
	Ear diseases	<i>Cladospodium spp.</i> , <i>Alternaria spp.</i>	Control if applied at ear emergence
	Take all	<i>Gaeumannomyces graminis var. Tritici</i>	Reduction in severity
Barley (winter or spring)	Net blotch	<i>Pyrenophora teres</i>	Control
	Brown rust	<i>Puccinia hordei</i>	Control
	Leaf blotch	<i>Rhynchosporium secalis</i>	Reduction
	Take all	<i>Gaeumannomyces graminis var. Tritici</i>	Reduction in severity

**3. Winter and spring oats, rye and triticale:** Two applications of 1.0 L/ha are permitted in oats, rye and triticale. Application in rye and triticale must be between BBCH30-69 and before watery ripe stage (GS71) and application in oats must be between BBCH30-59 with the latest application before the beginning of flowering (GS61). AZOXYSTAR will control the following diseases in oats, rye and triticale crops:

Crop	Disease		Level of control expected
Oats (winter or spring)	Crown Rust	<i>Puccinia coronata</i>	Control
Rye, triticale	Brown rust	<i>Puccinia recondita</i>	Control
	Leaf blotch	<i>Rhynchosporium secalis</i>	Reduction
	Take all	<i>Gaeumannomyces graminis var. Tritici</i>	Reduction in severity

**4. Combining and vining peas:** Two applications of 1.0 L/ha are permitted in peas between BBCH17-72 with the last application at least 35 days before harvest for combining peas and 14 days before harvest for vining peas. Prior to treatment, ensure that the peas have adequate wax using a Crystal violet test kit. AZOXYSTAR will control the following diseases in pea crops:

Crop	Disease		Level of control expected
Peas (combining and vining)	Leaf and pod spot	<i>Ascochyta pisi</i>	Useful control
	Grey mould	<i>Botrytis cinerea</i>	Some reduction may be achieved.
	Blight	<i>Mycosphaerella</i>	Some reduction may be achieved.

**5. Bulb onions:** Three applications of 1.0 L/ha are permitted in bulb onions between BBCH14-48 with the last application at least 14 days before harvest. Optimum control is achieved by multiple applications at 7 – 10 day intervals starting when the disease is first seen in the crop or

when conditions are deemed suitable for disease development. Note that once disease is established in the crop treatment it is unlikely to give reliable control. AZOXYSTAR will control the following diseases in bulb onions:

Crop	Disease		Level of control expected
Bulb onions	Downy mildew	<i>Peronospora destructor</i>	Moderate control

**6. Leeks:** Three applications of 1.0 L/ha are permitted in leeks between BBCH16-48 with the last application at least 21 days before harvest. Note that once disease is established in the crop treatment it is unlikely to give reliable control. AZOXYSTAR will control the following diseases in leeks:

Crop	Disease		Level of control expected
Leeks	Leek rust	<i>Puccinia porri</i>	Control
	Purple blotch	<i>Alternaria porri</i>	Moderate control
	White tip	<i>Phytophthora porri</i>	Moderate control

**7. Carrots:** Three applications of 1.0 L/ha are permitted in carrots between BBCH16-49 with the last application at least 14 days before harvest. Note that once disease is established in the crop treatment it is unlikely to give reliable control. AZOXYSTAR will control the following diseases in carrots:

Crop	Disease		Level of control expected
Carrots	Alternaria leaf blight	<i>Alternaria dauci</i>	Control
	Powdery mildew	<i>Erysiphe polygoni</i>	Control

**8. Asparagus:** Two applications of 1.0 L/ha are permitted in asparagus between BBCH41-89 with the last application applied before the end of September or before crop senescence, whichever is sooner. Note that once disease is established in the crop treatment it is unlikely to give reliable control but the earliest application time is after the end of commercial cutting for the year. Where new beds are being established do not treat until at least three weeks after planting out the crowns. AZOXYSTAR will control the following diseases in asparagus:

Crop	Disease		Level of control expected
Asparagus	Stemphylium	<i>Stemphylium botrysosum</i>	Moderate control
	Rust	<i>Puccinia asparagi</i>	Moderate control

**9. Field beans:** Two applications of 1.0 L/ha are permitted in field beans between BBCH60-69 with the last application applied at least 35 days before harvest. Treatment should begin when the disease is first seen in the crop or when conditions are deemed suitable for disease development. A second application may be required where disease pressure remains high (a minimum interval of 21 days must be observed between applications). Note that once disease is established in the crop treatment it is unlikely to give reliable control. AZOXYSTAR will control the following diseases in field beans:

Crop	Disease		Level of control expected
Field beans	Rust	<i>Uromyces vicia fabae</i>	Control

**10. Brassicas:** Two applications of 1.0 L/ha are permitted in Brassicas between BBCH16-49 with the last application applied at least 14 days before harvest. Treatment should begin when the disease is first seen in the crop or when conditions are deemed suitable for disease development. A second application may be required where disease pressure remains high but maintain an interval of at least 12 days between applications. Note that once disease is established in the crop treatment is unlikely to give reliable control. AZOXYSTAR will give moderate control of the following diseases in Brussels sprouts, Broccoli, Calabrese, Cabbage, Cauliflower, Kale (winter greens), Collards (spring greens):

Crop	Disease		Level of control expected
Brassicas – Brussels sprouts, Broccoli, Cabbage, Cauliflower, Kale, Collards and Calabrese	Alternaria	<i>Alternaria brassicae</i> & <i>Alternaria brassicicola</i>	Moderate control
	Ring spot	<i>Mycosphaerella brassicicola</i>	Moderate control
	White blister	<i>Albugo candida</i>	Moderate control

**11. Potatoes:** One in-furrow application is allowed in potatoes. This should be 3.0 L/ha applied at planting in the furrow with the seed potatoes and can reduce the severity of the soil-borne diseases listed in the table below. Aim the treatment at the soil not the tubers and note that the tubers should not have started to sprout. Where sprouting has started it may cause a delay in emergence.

Crop	Disease		Level of control expected
Potatoes	Stem Canker	<i>Rhizoctonia solani</i>	Reduction
	Black Scurf	<i>Rhizoctonia solani</i>	Reduction
	Black Dot	<i>Colletotrichum coccodes</i>	Reduction

Tubers that have previously been treated with imazalil/penicycuron or imazalil/penicycuron mixtures are at greater risk of delayed emergence. These effects are normally but not always out-grown. Do not use AZOXYSTAR on highly organic soils since treatment efficacy will be reduced.

Post-emergence three applications of 0.5 l/ha are permitted for moderate control of early blight between BBCH 51-85. Maintain an interval of at least 7 days between applications and complete applications at least 7 days before harvest.

Potatoes (post-em)	Early blight	<i>Alternaria solani</i>	Moderate control
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#### MIXING AND SPRAYING

Users should always inspect crops to assess disease development immediately before spraying.

Before spraying it is important to check all hoses, filters and nozzles, and to ensure that the sprayer is clean and correctly set to give an even application at the correct volume. Half fill the spray tank with clean water. Begin agitation and add the required quantity of AZOXYSTAR directly to the tank. Add the remainder of the water and agitate the mixture thoroughly before and during spraying. When using tank-mixtures, check whether there is an order of mixing in the compatibility section below.

#### Application:

For cereals, combining peas, fresh peas, oilseed rape, carrots, leek, potatoes (foliar) and bulb onions application should be made using a MEDIUM quality spray as defined by BCPC in a minimum of 200 L/ha.

For Brussels sprouts, cabbage, cauliflower, kale (winter greens), collards (spring greens), broccoli and calabrese application should be made using a MEDIUM quality spray as defined by BCPC in a minimum of 250 L/ha at a pressure of at least 2 bar.

For asparagus application should be made using a MEDIUM quality spray as defined by BCPC in a minimum of 600 L/ha at a pressure of at least 2 bar.

For potatoes (in-furrow) apply between 50-150 litres of water per hectare. Apply using specialist in-furrow application equipment.

Where crops are dense the water volume should be increased to 250-300 L/ha.

#### RESISTANCE MANAGEMENT

Good resistance management techniques should be adopted when using AZOXYSTAR. Strategies should include mixtures or sequences with other fungicides with different modes of action where appropriate and non-chemical methods such as selection of varieties with inherent resistance to some diseases. Note the limits on the number of applications of fungicides with the QoI mode of action in nominated crops.

- All cereal crops: Statutory maximum of two QoI fungicides. On cereal crops AZOXYSTAR must always be used in mixture with another product, recommended for control of the same target disease that contains a fungicide from a different cross resistance group and is applied at a dose that will give robust control.
- Bulb onions, leeks and carrots: Two applications if applied alone or three applications if applied with a fungicide from a different cross-resistance group. FRAC has recently published guidelines on the number of QoI applications in these crops and these are summarised in the following table:

Total number of spray applications per crop	1	2	3	4	5	6	7	8	9	10	11	≥12
Maximum recommended Solo QoI fungicide sprays	1	1	2	2	2	2	3	3	3	3	4	
Max. recommended QoI fungicide sprays in mixture	1	2	2	2	3	3	4	4	4	4	4	

- Asparagus: A maximum of two applications of AZOXYSTAR per crop
- Field beans, Brassica crops, combining peas, vining peas and oilseed rape: Two applications of AZOXYSTAR.
- Potatoes: Where AZOXYSTAR has been used on the tubers or at planting no more than two further QoI sprays should be used sequentially as the first sprays against late blight before switching to a spray with an alternative mode of action.

When applying these fungicides, use doses that will give good control. Strains of barley powdery mildew that are resistant to QoI fungicides are common in the UK and there is already a significant risk of widespread resistance to QoI fungicides in some Septoria tritici populations. The development of resistance in other pathogens cannot be ruled out and, where this occurs, reduced control is inevitable. Consult the FRAG UK guidelines on QoI fungicides.

#### COMPATIBILITY

AZOXYSTAR is physically compatible with a wide range of other pesticides but the crop safety and product performance has not been tested and so use is at the growers own risk. Information on physically compatible mixtures is given below or, for more details, contact your supplier.

**Fungicides:**

Active ingredient	Product name
azoxystrobin + cyproconazole	Priori Xtra
chlorothalonil	Bravo 500
chlorothalonil + cyproconazole	Alto Elite
chlorothalonil + cyproconazole + propiconazole	Cherokee
cyprodinil	Kayak
epoxiconazole <sup>1</sup>	Opus
fenpropimorph	Corbel
fluxastrobin + prothioconazole	Fandango
flutriafol	Pointer
metconazole	Caramba
prochloraz + proquinazid + tebuconazole	Vareon
proquinazid	Justice, Talius
prothioconazole	Proline
prothioconazole + spiroxamine	Helix
quinoxifen	Apres, Fortress

<sup>1</sup> When mixing AZOXYSTAR with epoxiconazole + fenpropidin, mix in this order and do not use full rates or epoxiconazole or fenpropidin.

**Herbicides:**

Active ingredient	Product name
clodinafop-propargyl	Topic
florasulam	Boxer
florasulam + fluroxypyr	Starane XL
MCPA	Agriter 50
mecoprop-P	Duplosan KV
mecoprop-P	Optica
metsulfuron-methyl + thifensulfuron-methyl	Harmony M SX
metsulfuron-methyl + tribenuron-methyl <sup>2</sup>	Aly Max SX
pinoxaden + adjuvant	Axial, Adigor
tribenuron-methyl	Quantum SX

<sup>2</sup> When mixing AZOXYSTAR with metsulfuron-methyl + tribenuron +/fluroxypyr, add AZOXYSTAR to the tank last.

**Insecticides:**

Active ingredient	Product name
lambda-cyhalothrin <sup>3</sup>	Hallmark with Zeon Technology
tau-fluvalinate	Mavrik

<sup>3</sup> Add AZOXYSTAR to the tank first.

**Plant Growth Regulators:**

Active ingredient	Product name
chlormequat	3C Chlormequat 750
trinexapac-ethyl	Moddus

**Trace elements:**

AZOXYSTAR is also compatible with a number of trace element products which should be added to the spray tank last with agitate on running and should be sprayed immediately. For details of compatible mixtures, contact your supplier.

**CLEANING OF APPLICATION EQUIPMENT**

To avoid damage to other crops, the application equipment must be thoroughly de-contaminated after application.

- Immediately after application, drain the tank completely and wash down with clean water. Rinse out the tank and flush through the booms and hoses.
- Half-fill the tank with clean water and add the recommended dose of detergent cleaner. Agitate and then flush the boom and hoses with the cleaning solution. Top up the tank so that it is completely full and leave to stand for 15 minutes with the agitation running. Flush the booms and hoses again and drain completely.
- Remove the nozzles and filters and clean separately in a solution of detergent cleaner in 10 litres of water.
- Rinse the tank again with clean water, using at least 10% of the tank volume and dispose of the washings safely. For disposal of washings in the UK, follow the DEFRA Code of Practice for Using Plant Protection (2006) while in Ireland you should comply with local and national regulations.

**COMPANY ADVISORY INFORMATION**

This information is not part of the approved label under Regulation (EC) 1107/2009 but provides additional company advice on the product use.

**CONDITIONS OF SUPPLY**

All goods supplied by the company are of good quality and we believe them to be fit for purpose. However, 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, and 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.