

# AZOXYSTAR<sup>®</sup>

## FUNGICIDE

GROUP 11 (FUNGICIDE)

F

For the control of certain diseases in a range of crops. See detailed label text for specific crop approval information.

CEREALS, OILSEED RAPE,  
PEAS AND BEANS, POTATOES,  
STRAWBERRIES, VEGETABLES

PCS No. 05534

250 g/l (22.7%) azoxystrobin  
Suspension Concentrate

NET CONTENT: **5L**

FOR USE ONLY AS A PROFESSIONAL FUNGICIDE

**lifescientific**   
FIRST TO MARKET

### WARNING



**Harmful if inhaled**

**Very toxic to aquatic life with long lasting effects**

Keep out of reach of children

Avoid breathing fumes/ mist/ vapours/ spray

Use only outdoors or in a well-ventilated area

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTRE/doctor if you feel unwell

Collect spillage

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.

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

FOR PROFESSIONAL USE ONLY

PCS No. 05534

UFI: 6DYV-C0R5-H00U-US73

170010610801\_V3

**AZOXYSTAR® - PCS No. 05534****A SUSPENSION CONCENTRATE CONTAINING 250 G/L AZOXYSTROBIN****AZOXYSTAR® is a broad-spectrum fungicide with translaminar, systemic and protectant activity.**

PEEL BACK FOR DIRECTIONS FOR USE LEAFLET

**IMPORTANT INFORMATION: FOR USE ONLY AS AN AGRICULTURAL AND HORTICULTURAL FUNGICIDE**

Crop	Maximum individual dose (litres product/ha)	Maximum number of treatments	Maximum total dose	Latest time of application
Winter wheat, spring wheat, rye and triticale	1.0 L/ha	Two per crop	2.0 L/ha	Before grain watery ripe stage (GS 71)
Winter barley, spring barley, oats	1.0 L/ha	Two per crop	2.0 L/ha	Before beginning of flowering (GS 61)
Winter and spring oilseed rape	1.0 L/ha	Two per crop	2.0 L/ha	21 days before harvest
Combining peas, field beans	1.0 L/ha	Two per crop	2.0 L/ha	35 days before harvest
Broad bean, vining peas	1.0 L/ha	Two per crop	2.0 L/ha	14 days before harvest
Bulb onion, garlic, shallot, carrots	1.0 L/ha	Three per crop	3.0 L/ha	14 days before harvest
Leeks	1.0 L/ha	Three per crop	3.0 L/ha	21 days before harvest
Asparagus	1.0 L/ha	Two per crop	2.0 L/ha	Before senescence
Outdoor crops of broccoli, calabrese, Brussels sprouts, cabbage, cauliflower, collards, kale*	1.0 L/ha	Two per crop	2.0 L/ha	14 days before harvest
Strawberries (outdoor and protected)	1.0 L/ha	Three per crop	3.0 L/ha	3 days before harvest
Lettuce, endive (outdoor and protected)*	1.0 L/ha	Two per crop	2.0 L/ha	14 days before harvest
Potato (in-furrow application)	3.0 L/ha	One per crop	3.0 L/ha	At planting
<b>Other specific restrictions:</b>				
<ul style="list-style-type: none"> <li>To reduce the risk of resistance developing in target diseases the total number of applications of product containing QoI fungicides made to any cereal crop must not exceed two.</li> <li>*For uses on crops of broccoli, calabrese, Brussels sprouts, cabbage, cauliflower, collards, lettuce, endive and kale, a maximum total dose of 500g azoxystrobin must not be exceeded within a 12-month period on the same field.</li> </ul>				
<b>READ THE LABEL AND SAFETY PRECAUTIONS BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE.</b>				
<b>FOLLOW THE PRINCIPLES OF GOOD PLANT PROTECTION PRACTICE FOR USING PLANT PROTECTION PRODUCTS.</b>				



**APPROVAL HOLDER:** Life Scientific Limited,  
Block 4, Belfield Office Park, Beech Hill Road, Dublin 4, Ireland. Tel: +353 (1) 2832024

**In case of Emergency:** Tel. NPIC +353 (1) 809 2166 (8.00 a.m. to 10.00 p.m.- Public)  
Tel. NPIC +353 (1) 809 2566 (Healthcare professionals)

**SHAKE WELL**

170010610802\_V10

**PROTECT FROM FROST****MADE IN EU****SHAKE WELL BEFORE USE****BATCH NO. SEE PACKAGING**

## 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).

For use by tractor mounted/trailed sprayer or handheld knapsack sprayer.

### 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 of 5 m to surface water bodies.

### 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. For specific information see directions for use table.

AZOXYSTAR® is a systemic, translaminar and protectant strobilurin fungicide and belongs to the DoI group of fungicides. AZOXYSTAR® 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 BBCH 60-69 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 BCPC 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)	Dark leaf and pod spot	<i>Alternaria</i> spp.	Moderate 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.
	Stem rot	<i>Sclerotinia sclerotiorum</i>	Moderate control- apply as a protectant spray. Optimum timing is early to mid flowering (BBCH 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 (GS 71) and application in barley must be between BBCH 30-59 and before the beginning of flowering (GS 61). 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>Cladosporium spp.</i> , <i>Alternaria spp.</i>	Control
	Take-all	<i>Gaeumannomyces graminis var tritici</i>	Reduction in severity
Barley (winter or spring)	Net blotch	<i>Pyrenophora teres</i>	Moderate 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 BBCH 30-69 and before watery ripe stage (GS 71) and application in oats must be between BBCH 30-59 with the latest application before the beginning of flowering (GS 61). 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. Broad bean and peas (combining and vining):** Two applications of 1.0 L/ha are permitted in broad beans and peas between BBCH 17-72 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. A minimum of 14 days must be observed between applications. AZOXYSTAR® will control the following diseases in peas and broad beans:

Crop	Disease		Level of control expected
Peas (combining and vining)	Leaf and pod spot	<i>Ascochyta pisi</i>	Useful reduction
	Downy mildew	<i>Peronospora viciae</i>	Reduction
Broad beans	Rust	<i>Uromyces spp.</i>	Control

**5. Bulb onions, shallots and garlic:** Three applications of 1.0 L/ha are permitted between BBCH 14-48 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 is unlikely to give reliable control. AZOXYSTAR® will control the following diseases in bulb onions, shallots and garlic:

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

**6. Leeks:** Three applications of 1.0 L/ha are permitted in leeks between BBCH 16-48 with the last application at least 21 days before harvest. Note that once disease is established in the crop treatment is unlikely to give reliable control. AZOXYSTAR® will control the following diseases in leeks:

Crop	Disease		Level of control expected
Leeks	Leaf 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 BBCH 16-49 with the last application at least 14 days before harvest. Note that once disease is established in the crop treatment 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 BBCH 41-89 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 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 botryosum</i>	Moderate control
	Rust	<i>Puccinia asparagi</i>	Moderate control

**9. Strawberry (outdoor and protected):** For optimum results apply as a protectant spray at the beginning of flowering. Two further applications can be made if disease pressure remains high.

Application should be made in sequence with other products as part of a fungicide programme during flowering at a minimum interval of 7 days. Strawberries can be treated from BBCH 51-89.

No more than 3 applications per crop. AZOXYSTAR® is moderately effective against Powdery mildew (*Podosphaera macularis*).

Crop	Disease		Level of control expected
Strawberry (outdoor and protected)	Powdery mildew	<i>Podosphaera macularis</i>	Moderate

**10. Field beans:** Two applications of 1.0 L/ha are permitted in field beans between BBCH 60-69 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 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 spp.</i>	Control

**11. Brassicas:** Two applications of 1.0 L/ha are permitted in brassicas between BBCH 16-49 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
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

**12. 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
		<i>Rhizoctonia solani</i>	Reduction
	Black Dot	<i>Colletotrichum coccodes</i>	Reduction

Tubers that have previously been treated with imazali, pencycuron or imazali/pencycuron 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.

**13. Outdoor and protected lettuce, endive:** Before applying, ensure the crop is free from any stress caused by environmental or agronomic effects. Lettuce, endive can be treated from BBCH 14-49. A minimum of 7 days must be observed between applications for both protected and outdoor use. AZOXYSTAR® will control the following diseases in lettuce and endive.

Crop	Disease		Level of control expected
Lettuce, endive	Downy mildew	<i>Bremia spp.</i>	Control

#### 14. Indoor Crops:

Application should be made via a hydraulic nozzle applicator e.g. motorised sprayer with hand or boom lance or via a knapsack sprayer. Lettuce and associated crops: Apply in at least 300 litres of water per hectare.

Strawberry: Apply in at least 100 litres of water per hectare.

#### 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 broad beans: Apply in at least 150 litres of water per hectare. For cereals, combining peas, vining peas, field beans, oilseed rape, carrots, leek, bulb onions, garlic, shallots and potatoes (in-furrow) 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 Strawberries and lettuce: Apply in at least 300 litres of water per hectare.

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. No more than 3 applications of AZOXYSTAR® are permitted per crop. 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	2	3	3	3	3	4
Max. recommended QoI fungicide sprays in mixture	1	2	2	2	3	3	4	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 Ireland 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. For detailed information contact Teagasc, independent advisors or your supplier.

#### COMPATIBILITY

AZOXYSTAR® is physically compatible with a wide range of other pesticides but the crop safety and product performance have not been tested and so use is at the grower's own risk. For more detailed, contact Teagasc, independent advisors or your supplier.

#### Trace elements

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

#### CLEANING OF APPLICATION EQUIPMENT

To avoid damage to other crops, the application equipment must be thoroughly decontaminated 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.

#### 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.