# azoshy

A suspension concentrate formulation containing 250 g/l (22.69% w/w) azoxystrobin.

A broad spectrum fungicide for wheat, barley, oats, rye, triticale, combining and vining peas, oilseed rape, bulb onions, leeks, carrots, asparagus (outdoor), field beans, outdoor crops of brussels sprouts, cabbage, cauliflower, kale (winter greens), collards (spring greens), broccoli, calabrese, potatoes (foliar spray and in furrow). The COSHH (Control of Substances Hazardous to Health) Regulations may apply to the use of this product at work.



MAPP: 18072



HAZARDOUS TO THE AQUATIC ENVIRONMENT – ACUTE 1

HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC 1

VERY TOXIC TO AQUATIC LIFE

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.

Avoid release to the environment.

Collect spillage.

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.

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.

IMP	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), broccoli & calabrese**	1.0 L/ha	Two per crop	12	14 days before harvest		
Potatoes (Foliar spray)	0.5 L/ha	Three per crop	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	of resistance developing in target dis	eases the total number of application	n of product containing Ool fungicides made	e to any cereal crop must not exceed two		

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

\*\*A maximum total dose of 500 g 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 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

Contents: 5L
Batch number:
Manufacturing date:
Approval holder:
Sharda Cropchem Ltd..
Domnic Holm 29th Road , Bandra (West)
Mumbai – 400050
India
Tel: -+91-22-6678 2800

Marketing company: Sharda Europe b.v.b.a. Jozef Mertensstraat 142, 1702 Dilbeek. Belgium Tel: + 32 – 2-4664444





#### 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 ĬN 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 container safely. DO NOT RE-USE CONTAINER for any purpose.

Protect from frost.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS. KEEP OUT OF REACH OF CHILDREN.

## **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.

AZOSHY is a systemic translaminar and protectant strobilurin fungicide and belongs to the Qol 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.

Always inspect crops to assess disease development immediately before spraying. 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.

#### RESTRICTION

On cereal crops, AZOSHY 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 AZOSHY. As a precaution AZOSHY should not be applied when there is a risk of spray drift onto neighbouring apple crops. Spray equipment used to apply AZOSHY 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 BCPC in a minimum of 200 L/ha. Where crops are dense the water volume should be increased to 250-300 L/ha. AZOSHY will control the following diseases in oilseed rape crops:

Crop	Disease		Level of control expected
Oilseed rape (Winter and	Dark leaf and pod spot	Alternaria 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.
Spring)	Sclerotinia stem rot	Sclerotonia sclerotiorum	Moderate control. Apply as a protectant spray during flowering. Optimum timing is early to mid flowering (BBCH GS 60 – 65)*

#### 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 application

in barley must be between BBCH30-59. For optimum activity against 5. Bulb onions: ear diseases application should be made at ear emergence. When used to control the listed foliar disease in wheat and barley, an application of Azoshy at the first or second node stage of the crop may also reduce the severity of take-all (*Gaeumannomyces graminis* var. Tritici) infection.

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

Crop	Disease		Level of control expected
Wheat	Glume blotch	Septoria nodorum	Control
(winter	Yellow rust	Puccinia striiformis	Control
òr	Brown rust	Puccinia recondita	Control
spring)	Ear diseases	Cladosporium spp., Alternaria spp.	Control if applied at ear emergence
Barley	Net blotch	Pyrenophora teres	Control
(winter	Brown rust	Puccinia hordei	Control
or spring)	Leaf blotch	Rhynchosporium secalis	Reduction

## 3. Winter and spring oats, rye and triticale:

When used to control the listed foliar disease in rye and triticale, an application of Azoshy at the first and second node stage of the crop may also reduce the severity of Take-all infection. Two applications 7. Carrots: of 1.0 L/ha are permitted in oats, rve and triticale. Application in rve 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). AZOSHY will control the following diseases in oats, rye and triticale diseases in carrots: crops:

Crop	Disease		Level of control expected
Oats (winter or spring)	Crown Rust	Puccinia coronata	Control
Rye, triticale	Brown rust	Puccinia recondita	Control
	Leaf blotch	Rhynchosporium secalis	Reduction

# 4. Combining and vining peas:

When Azoshy is used to control leaf and pod spot, some control of Grey mould (Botrytis cinereal) and Mycosphaerella blight may be achieved. 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. AZOSHY will control the following diseases in pea crops:

Crop	Disease		Level of control expected
Peas (combining and vining)	Leaf and pod spot	Ascochyta pisi	Useful control

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 is unlikely to give reliable control. AZOSHY will control the following diseases in bulb onions:

Crop	Disease		Level of control expected
Bulb onions	Downy mildew	Peronospora destructor	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 is unlikely to give reliable control, AZOSHY will control the following diseases in leeks:

Crop	Disease		Level of control expected
Looko	Leek rust	Puccinia porri	Control
Leeks	Purple blotch	Alternaria porri	Moderate control

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 is unlikely to give reliable control. AZOSHY will control the following

Crop	Disease		Level of control expected
Corroto	Alternaria leaf blight	Altenaria dauci	Control
Carrois	Powdery mildew	Erysiphe polygoni	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 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. AZOSHY will control the following diseases in asparagus

Crop	Disease		Level of control expected
Asparagus	Stemphylium	Stemphylium botryosum	Moderate control
	Rust	Puccinia asparigi	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 21days must be observed between applications). Note that once disease is established in the crop treatment is unlikely to give reliable control. AZOSHY will control the following diseases in field beans:

Crop	Disease		Level of control expected
Field beans	Rust	Uromyces fabae	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. AZOSHY 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
-bi usseis	Altenaria	Altenaria brassicae & Altenaria brassicicola	Moderate control
sprouts, Broccoli, Cabbage, Cauliflower, Kale.	Ring spot	Mycosphaerella brassicicola	Moderate control
Collards and Calabrese	White blister	Albugo candida	Moderate control

#### 11. Potatoes:

Three post emergence applications of 0.5 l/ha are permitted between BBCG GS 51-85 for moderate control of early blight. A minimal interval of 7 days must be observed between applications with the last application at least 7 days before harvest.

Crop	Disease		Level of control expected
Potatoes (post emergence)	Early blight	Altenaria solani	Moderate control

One in-furrow application is allowed in potatoes. This should be 3.0 I/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
Datatasa	Stem Canker	Rhizoctonia solani	Reduction
Potatoes (in furrow	Black Scurf	Rhizoctonia solani	Reduction
	Black Dot	Colletotrichum coccodes	Reduction

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

## 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 AZOSHY 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, field beans, 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 and at pressure of at least 2 bar. Where crops are dense the water volume should be increased to improve coverage.

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 with a conventional tractor mounted spray equipment 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 at a pressure of at least 2 bar.

Do not leave the spray liquid in the sprayer for long periods (such as during meal breaks or overnight).

#### RESISTANCE MANAGEMENT

Axoshy contains azoxystrobin a member of the Qol cross resistance group. Azoshy should be used preventatively and should not be relied on for its curative potential. Disease control may be reduced if strains of pathogens less sensitive to azoxystrobin develop.

To avoid the likelihood of resistance developing, applications of Azoshy should be made with due regard tio the current FRAC and FRAG-UK guidelines for Qol compounds.

Good resistance management techniques should be adopted when using AZOSHY. Strategies should include mixtures or sequences with other fungicides with different modes of action where appropriate and nonchemical 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 Fungicides: nominated crops.

- All cereal crops: You must not apply more than two foliar applications of Qol-containing products to any cereal crop. On cereal crops AZOSHY 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: A maximum of two applications if applied alone or three applications if applied with a fungicide from a different cross- resistance group. To avoid the likelihood of resistance developing, applications of Azoshy should be made with due regards to current guidelines for QoI compounds, as illustrated below 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 Qol fungicide sprays	1	1	2	2	2	2	2	3	3	3	3	4
Max. recommended Qol fungicide sprays in mixture	1	2	2	2	2	3	3	4	4	4	4	4

- Asparagus: A maximum of two applications of AZOSHY per crop
- Field beans, Brassica crops, combining peas, vining peas and oilseed rape: A maximum of two applications of AZOSHY per crop.
- Potatoes: A maximum of one in-furrow application and a maximum of three foliar applications per season if the disease pressure remains high.

To avoid the likelihood of resistance developing to Qol compounds used to control potato late blight, application of Azoshy should be made with due regard to current FRAG-UK guidelines for Qol compounds. If an application of Azoshy is made, no more than two further QoI treatments should be applied sequentially as the first sprays against late blight before using an alternative product.

When applying these fungicides, use doses that will give good control.

Strains of barley powdery mildew that are resistant to Qol 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 quidelines on Qol fungicides.

## COMPATIBILITY

Information on a range of compatible mixtures is given below. For more details, contact your supplier.

MAPP Number of product
MAPP 11518
MAPP 14548
MAPP 08467
MAPP 13251
MAPP 14847
MAPP 12057
MAPP 00578
MAPP 12276
MAPP 12975
MAPP 15337
MAPP 14376
MAPP 12835, 12752
MAPP 12084
MAPP 12264
MAPP 08881, 08279

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

#### Harhicidae:

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Active ingredient	MAPP Number of product
clodinafop-propargyl	MAPP 15123
florasulam	MAPP 09819
florasulam + fluroxypyr	MAPP 10921
MCPA	MAPP 14814
mecoprop-P	MAPP 13971
mecoprop-P	MAPP 14373
metsulfuron-methyl + thifensulfuron-methyl	MAPP 12258
metsulfuron-methyl + tribenuron-methyl2	MAPP 14835
pinoxaden + adjuvant	MAPP 12521 - A0522
tribenuron-methyl	MAPP 15189

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

#### Insecticides:

Active ingredient	MAPP Number of product			
lambda-cyhalothrin3	MAPP 12629			
tau-fluvalinate	MAPP 10612			

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

# **Plant Growth Regulators:**

Active ingredient	MAPP Number of product				
Chlormequat	MAPP 16690				
Trinexapac-ethyl	MAPP 15151				

#### Trace elements:

AZOSHY 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 Products' (2006) while in Ireland you should comply with local and national regulations.

## COMPANY ADVISORY INFORMATION

The following does not form part of the product label under the UK Plant Protection Products Regulations but provides additional Company advice on the product use.

#### 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 and 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.

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