

# Amistar<sup>®</sup> Xtra

syngenta.

Reg. No. **L8567** Act No. 36 of 1947 **N-AR 1258** (Namibia) **W130610** (Botswana)

**Broad spectrum suspension concentrate fungicide with systemic, translaminar and contact properties for the preventative control of diseases in crops as listed.**

GROUP	11	FUNGICIDE
	3	

**Active Ingredients:**  
**azoxystrobin (strobilurin)..... 200 g/l**  
**cyproconazole (triazole)..... 80 g/l**

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**WARNING**

**Hazard statements:**

Harmful if swallowed or if inhaled. Suspected of damaging the unborn child. May cause damage to organs (liver) through prolonged or repeated exposure. Very toxic to aquatic life with long-lasting effects.

**Precautionary statements:**

**Prevention:** Obtain special instructions before use. Avoid breathing mist or vapours. Avoid release to the environment. **Disposal:** Dispose of contents/container to an approved waste disposal plant.

**Response:** If exposed or concerned get medical advice/attention. Collect spillage.

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**UN 3082**

Registration holder  
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**1. WARNINGS:**

**Hazard statements:** Harmful if swallowed or if inhaled. Suspected of damaging the unborn child. May cause damage to organs (liver) through prolonged or repeated exposure. Very toxic to aquatic life with long-lasting effects.

**Withholding periods:** Minimum number of days between last application and harvest.

<b>CANOLA</b> .....	<b>30 days</b>
<b>PASTURE GRASSES (ryegrass)</b> .....	<b>14 days</b>
<b>SOYBEANS</b> .....	<b>40 days</b>
<b>SUGARCANE</b> .....	<b>60 days</b>
<b>WHEAT AND BARLEY</b> .....	<b>63 days</b>

**NOTE:** Compliance with these withholding periods will ensure that residues do not exceed local maximum residue limits (MRL).

- Harmful if swallowed.
- Toxic to fish and harmful to other aquatic life.
- Avoid contact with skin or eyes since product may cause eye- and skin irritation.
- Store away from food and feed.
- Keep out of reach of children, uninformed persons and animals.
- **Re-entry:** Do not enter treated area until spray deposit has dried.

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions because the action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the weed against the remedy concerned, as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation and the environment, or harm to people or animals or for lack of performance of the remedy concerned due to failure of the user to follow the label instructions or to the occurrence of conditions, that could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

**2. PRECAUTIONS:**

**Precautionary statements:** **Prevention:** Obtain special instructions before use. Avoid breathing mist or vapours. Avoid release to the environment. **Disposal:** Dispose of contents/container to an approved waste disposal plant. **Response:** If exposed or concerned get medical advice/attention. Collect spillage.

- Do not eat, drink, or smoke while handling this product.
- Prevent contamination of food, feed, drinking water and eating utensils.
- Wear rubber gloves and a face shield when handling the product. If you get product in your eyes, flush it out at once. If you get it on your skin, wash it off at once. If you spill it on your clothes, change and wash them.
- Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the container three (3) times with a volume of water equal to a minimum of 10% of that of the container. Add the rinsate to the contents of the spray tank before destroying the container in the prescribed manner.
- While spraying, avoid contact with the spray as much as possible. Avoid spray drift onto other crops, grazing, rivers, or dams.
- Clean applicator thoroughly after use and dispose of rinsate where it will not contaminate crops, grazing, rivers, or dams.
- Destroy empty container in the prescribed manner and do not use for any other purpose.
- Change and wash your work clothes. Wash yourself.

**3. RELEVANT SUBSTANCES:**

Chemical name	
C16-18 alcohols, ethoxylated	
Classification	Concentration (% w/w)
Acute Tox. 4; H302 Eye Dam. 1; H318	≥ 20 - < 30
Chemical name	
azoxystrobin (ISO)	
Classification	Concentration (% w/w)

azoxystrobin (ISO) cont.	
Classification	Concentration (% w/w)
Acute Tox. 3; H331 Aquatic Acute 1; H400 Aquatic Chronic 1; H410  M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10	≥ 10 - < 20
Chemical name	
cyproconazole (ISO)	
Classification	Concentration (% w/w)
Acute Tox. 3; H301 Repr. 1B; H360D STOT RE 2; H373 (liver) Aquatic Acute 1; H400 Aquatic Chronic 1; H410  M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 1	≥ 2,5 - < 10
Chemical name	
Residues (petroleum), catalytic reformer ractionator, sulfonated, polymers with formaldehyde, sodium salts	
Classification	Concentration (% w/w)
Skin Irrit. 2; H315 Eye Dam. 1; H318	≥ 1 - < 3
Chemical name	
1,2-benzisothiazol-3(2H)-one	
Classification	Concentration (% w/w)
Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411  M-Factor (Acute aquatic toxicity): 1	≥ 0,025 - < 0,05

#### 4. RESISTANCE MANAGEMENT:

**AMISTAR XTRA** is classified as a group code 11 and 3 fungicide. Any fungus population may contain individuals naturally resistant to **AMISTAR XTRA** and other group code 11 and 3 fungicides. The resistant individuals can eventually dominate the fungus population if these fungicides are used repeatedly and exclusively in programs. These resistant fungi may not be controlled by **AMISTAR XTRA** or any other group code 11 and 3 fungicides.

##### To delay fungicide resistance:

- Avoid exclusive repeated use of fungicides from the same fungicide group code. Alternate with products from different fungicide group codes.
- Refer to individual product labels when alternating products or when using tank mixtures.
- Integrate other control methods (chemical, cultural, biological) into disease control programs.

#### 4.1 General

- **AMISTAR XTRA** should always be applied preventatively

as prescribed in the recommendations table.

- **AMISTAR XTRA** must be applied as a full-cover spray.
- Always use the dosage rates as recommended on the label.
- Never use **AMISTAR XTRA** as a corrective or curative application or after unsuccessful application of any other product.
- Use only azoxystrobin-related strobilurin products in the same program with **AMISTAR XTRA**.

For specific information on resistance management, contact the registration holder of this product (Syngenta South Africa) or visit the FRAC website at <http://www.frac.info/frac/index.html>.

**5. DIRECTIONS FOR USE:** Use only as indicated.

#### 5.1 Compatibility

**AMISTAR XTRA** is compatible with most fungicides, insecticides and acaricides with the exception of products containing heavy metals. The compatibility of **AMISTAR XTRA** may be influenced by the formulation of other products as well as water quality. Since the formulation of other products may change without Syngenta's knowledge and the quality of water may vary from farm to farm, a physical compatibility test should always be carried out prior to application.

#### 5.2 Mixing Instructions

- Half-fill the spray tank with clean water.
- Add the required amount of **AMISTAR XTRA** to the spray tank and top-up with water to the required volume while agitating continuously.
- If **AMISTAR XTRA** needs to be used in tank mix combinations, full cognisance must be taken of all WARNINGS, PRECAUTIONS and DIRECTIONS FOR USE on that label.
- First mix small quantities of the chemicals separately with water. It is recommended to add these mixtures together while agitating and check for any signs of incompatibility, e.g., flocculation.
- Continue agitation throughout application and do not allow the tank mixture to stand for any period of time.

#### 5.3 Application

- Ensure that the applicator to be used is in a good working condition and correctly calibrated.
- Use the spray volumes as indicated on the relevant tables to ensure good coverage.
- Ensure thorough agitation of the mixture in the tank during mixing and spraying.

**Influence of rain on application:** Should it rain within two (2) hours after application, the application must be repeated.

##### 5.3.1 Ground application

**AMISTAR XTRA** may be applied with conventional high-volume spray equipment.

Calibrate the apparatus before application to ensure that the correct dosage is applied. The distribution of the spray volume must be uniform throughout the target area.

Ensure good coverage of the whole plant (stems and leaves) by using enough water and suitable spraying equipment.

### 5.3.2 Aerial application

#### Avoid chemical drift at all times.

Aerial application of this product may only be done by a registered aerial application operator using a correctly calibrated, registered aircraft according to the instructions of SANS 10118 (Aerial Application of Agricultural Remedies). It is important to ensure that the spray mixture is distributed evenly over the target area and that the loss of spray material during application is restricted to a minimum. It is essential that the following criteria are met:

#### a) Application parameters:

- **Volume:** A volume of 30 - 40 ℓ/ha is recommended. As this product has not been evaluated at a reduced volume rate, the registration holder cannot guarantee efficacy or be held responsible for any adverse effects if the product is applied aerially at a lower volume rate than recommended above.
- **Droplet coverage:** Coverage of 25 - 30 droplets per cm<sup>2</sup> must be recovered at the target.
- **Droplet size:** A droplet spectrum with a VMD of 280 - 300 microns is recommended. Ensure that the production of fine droplets (less than 150 microns, resulting in high drift and evaporation potential) is restricted to a minimum.
- **Flying height:** The height of the spray boom should be maintained at 3 - 4 metres above the target. Do not spray when aircraft is in a climb, at the top of or during a dive, or when banking or turning.

#### b) Equipment:

- Use suitable atomising equipment (hydraulic nozzles or rotary atomisers) that will produce the desired droplet size and coverage, and ensure the minimum loss of product either through endodrift (within target field) or exodrift (outside target field).
- The operator must use a setup that will produce a droplet spectrum with the lowest possible relative span.
- All nozzles/atomisers should be positioned within the inner 60 - 75% of the wingspan to prevent droplets from entering the wingtip vortices.

#### c) Meteorological conditions:

- The difference in temperature between the wet and dry bulb thermometers of a whirling hygrometer, should not exceed 8°C. The addition of a suitable anti-evaporant is recommended if the VMD of the droplets is less than 200 - 250 microns.
- Only spray if the wind speed is between 5 - 15 km/h.
- Aerial application of this product must not be done under turbulent, unstable conditions during the heat of the day when rising thermals and downdraughts occur.
- Also note that the application of this product under temperature inversion conditions (spraying in or above the inversion layer) may lead to the following:
  - Reduced efficacy due to suspension and evaporation of small droplets in the air (inadequate coverage).
  - Damage to other sensitive crops and/or non-target areas through the movement of the suspended spray cloud away from the target field.

- Under the following climatic conditions drift could extend beyond 3 - 5 km from the nearest spray path of the aircraft:
  - Cloudy weather with relative humidity above 80% and low air movement of less than 5 km/h. When such conditions prevail, aerial application should NOT be carried out, especially when other sensitive crops, seedlings and fruit trees such as apple trees in the budding and early growth stage, occur within 5 km of the closed application swath.
- Ensure that the aerial spray operator knows which fields to spray by pinpointing their location using a map or GPS coordinates. Indicate to the operator adjacent environmentally sensitive areas or sensitive neighbouring crops, beehives, or water sources that could be affected by the pesticide.

**Obtain assurance from the aerial spray operator that the above requirements will be met and that all relevant data will be captured in a logbook and kept for future reference.**

### 5.4 Recommendations

For the best results, study the sections under 4 and 5 thoroughly.

#### CANOLA

Disease	Dosage
<b>Dark leaf and pod spot</b> ( <i>Alternaria brassicae</i> )	<b>Ground application</b> 1 000 - 2 000 ml/ha
<b>Remarks</b>	
<ul style="list-style-type: none"> <li>• Apply as part of a preventative spray program.</li> <li>• Ensure that the crop is free from environmental stress conditions or agronomic effects.</li> <li>• A second application may be needed under high disease pressure conditions or if disease pressure remains high.</li> <li>• Applications can be made up to onset of ripening, or 30 days prior to harvest, whichever occurs first.</li> </ul>	
<b>Spray volumes</b>	
<b>Tractor application:</b> 200 - 450 ℓ water/ha	

#### PASTURE GRASSES

(Ryegrass)

Disease	Dosage
<b>Grey leaf spot or blast disease</b> ( <i>Pyricularia grisea</i> )	<b>Ground application</b> 750 ml/ha
<b>Remarks</b>	
<ul style="list-style-type: none"> <li>• Apply one (1) application with <b>AMISTAR XTRA</b> at plant establishment stage or within a week after planting.</li> <li>• Do not use grasses for feed or grazing within 14 days after application.</li> </ul>	
<b>Spray volumes</b>	
<b>Tractor application:</b> 200 - 400 ℓ water/ha	

#### SOYBEANS

Disease	Dosage
<b>Soybean rust</b> ( <i>Phakopsora pachyrhizi</i> )	<b>Ground and aerial application</b> 300 ml/ha

## SOYBEANS cont.

### Remarks

- Apply at first signs of disease or at flowering if no disease is present and repeat 14 - 21 days later.
- If weather conditions favour disease development (temperatures of 15 - 28°C and high humidity) apply the shorter interval.
- For season-long control of foliar diseases, it is important that a spray program be used.
- If the disease appears before or during flowering, more than one (1) application may be necessary.
- Should the disease appear late in the growing season, a single application will be sufficient.
- Do not make more than two (2) applications of **AMISTAR XTRA** on soybeans in the same growing season.

### Spray volumes

**Tractor application:** 300 - 400 ℓ water/ha  
**Aerial application:** 30 - 40 ℓ water/ha

## SUGARCANE

Disease	Dosage
<b>Brown rust</b> ( <i>Puccinia melanocephala</i> )	<b>Ground application</b> 500 mℓ/ha
<b>Orange rust</b> ( <i>Puccinia kuehnii</i> )	

### Remarks

- Apply preventatively at 4 - 6-leaf stage or when conditions favour disease development and the first signs of disease symptoms appear.
- Apply two (2) applications with **AMISTAR XTRA** at 28-day intervals.
- Do not apply **AMISTAR XTRA** more than four (4) times per crop cycle.
- The addition of an adjuvant may enhance disease control potential of **AMISTAR XTRA**.

### Spray volumes

**Tractor application:** 300 - 400 ℓ water/ha  
**Aerial application:** 30 - 40 ℓ water/ha

## WHEAT AND BARLEY

Crop/Disease	Dosage
<b>WHEAT</b> <b>Powdery mildew</b> ( <i>Erysiphe graminis</i> ) <b>Leaf rust</b> ( <i>Puccinia recondita</i> ) <b>Yellow or stripe rust</b> ( <i>Puccinia striiformis</i> ) <b>Speckled leaf blotch</b> ( <i>Septoria tritiformis</i> ) <b>Glume blotch</b> ( <i>Septoria nodorum</i> )	<b>Ground and aerial application</b> 500 mℓ/ha
<b>BARLEY</b> <b>Leaf scald</b> ( <i>Rhynchosporium secalis</i> ) <b>Net blotch</b> ( <i>Pyrenophora teres</i> ) <b>Leaf rust</b> ( <i>Puccinia hordei</i> ) <b>Powdery Mildew</b> ( <i>Erysiphe graminis</i> )	

### Remarks

#### Speckled or glume blotch and powdery mildew

- Use the third leaf as indicator and apply when not more than 5% of the surface of this leaf is infected.
- Optimum time for this application is between the flag-leaf and ear-emergence stages (37 - 51 BBCH).

#### Leaf rust, yellow or stripe rust

- Apply at first signs of the disease.
- Follow up with a second application 21 - 28 days later.

### WHEAT cont.

- Do no more than two (2) applications of **AMISTAR XTRA** on wheat in the same growing season.

### Spray volumes

**Tractor application:** 200 - 300 ℓ water/ha  
**Aerial application:** 30 - 40 ℓ water/ha

### BARLEY

**Leaf scald**  
(*Rhynchosporium secalis*)

**Net blotch**  
(*Pyrenophora teres*)

**Leaf rust**  
(*Puccinia hordei*)

**Powdery Mildew**  
(*Erysiphe graminis*)

**Ground and aerial application**  
500 mℓ/ha

### Remarks

- Apply at first signs of disease, but not later than the 6-leaf stage (37 - 51 BBCH).
- Follow up with a second application 21 - 28 days later.
- Do not apply more than two (2) applications of **AMISTAR XTRA** to barley in the same growing season.

### Spray volumes

**Tractor application:** 200 - 300 ℓ water/ha  
**Aerial application:** 30 - 40 ℓ water/ha

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