

## AMISTAR TOP

Version 6 - This version replaces all previous versions.

Revision Date 26.10.2018

Print Date 14.11.2018

### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifier

Product name : **AMISTAR TOP**

Design code : A13703G

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Use : Fungicide

#### 1.3 Details of the supplier of the safety data sheet

Company Syngenta Crop Protection AG  
Postfach  
CH-4002 Basel  
Switzerland

Telephone : +41 61 323 11 11

Telefax : +41 61 323 12 12

E-mail address : sds.ch@syngenta.com

#### 1.4 Emergency telephone number

**Emergency tele-  
phone number** : +44 1484 538444

### SECTION 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EU) 1272/2008

Skin sensitisation	Category 1	H317
Acute toxicity (Inhalation)	Category 4	H332
Acute aquatic toxicity	Category 1	H400
Chronic aquatic toxicity	Category 1	H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xn, Harmful

N, Dangerous for the environment

R20: Harmful by inhalation.

R43: May cause sensitisation by skin contact.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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### 2.2 Label elements

Labelling: Regulation (EC) No. 1272/2008

Hazard pictograms



Signal word	:	Warning	
Hazard statements	:	H317 H332 H410	May cause an allergic skin reaction. Harmful if inhaled. Very toxic to aquatic life with long lasting effects.
Precautionary statements	:	P102 P261 P280  P302 + P352 P304 + P340  P312  P333 + P313  P391 P501	Keep out of reach of children. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wear protective gloves/ protective clothing/ eye protection/ face protection. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. If skin irritation or rash occurs: Get medical advice/ attention. Collect spillage. Dispose of contents/ container to an approved waste disposal plant.
Supplemental information	:	EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Hazardous components which must be listed on the label:

- azoxystrobin

Labelling: EU Directives 67/548/EEC or 1999/45/EC

Symbol(s)



Harmful



Dangerous  
for the envi-  
ronment

R-phrases(s)	:	R20 R43 R51/53	Harmful by inhalation. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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S-phrase(s) : S 2 Keep out of the reach of children.  
 S13 Keep away from food, drink and animal feedingstuffs.  
 S20/21 When using do not eat, drink or smoke.  
 S35 This material and its container must be disposed of in a safe way.  
 S36/37 Wear suitable protective clothing and gloves.  
 S57 Use appropriate container to avoid environmental contamination.

**Additional Labelling** : To avoid risks to man and the environment, comply with the instructions for use.

Hazardous components which must be listed on the label:

- azoxystrobin

### 2.3 Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

#### Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration
azoxystrobin	131860-33-8	T, N R23 R50/53	Acute Tox.3; H331 Aquatic Acute1; H400 Aquatic Chronic1; H410	18.0 % W/W
difenoconazole	119446-68-3	Xn, N R22 R50/53	Acute Tox.4; H302 Aquatic Acute1; H400 Aquatic Chronic1; H410	11.3 % W/W
C16-18 alcohols, ethoxylated	68439-49-6	Xn R22 R41	Acute Tox.4; H302 Eye Dam.1; H318	15 - 25 % W/W

Substances for which there are Community workplace exposure limits.

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

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### SECTION 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

- General advice : Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control center or physician, or going for treatment.
- Inhalation : Move the victim to fresh air.  
If breathing is irregular or stopped, administer artificial respiration.  
Keep patient warm and at rest.  
Call a physician or poison control centre immediately.
- Skin contact : Take off all contaminated clothing immediately.  
Wash off immediately with plenty of water.  
If skin irritation persists, call a physician.  
Wash contaminated clothing before re-use.
- Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Remove contact lenses.  
Immediate medical attention is required.
- Ingestion : If swallowed, seek medical advice immediately and show this container or label.  
Do NOT induce vomiting.

#### 4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No information available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

- Medical advice : There is no specific antidote available.  
Treat symptomatically.

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### SECTION 5. FIREFIGHTING MEASURES

#### 5.1 Extinguishing media

Extinguishing media - small fires  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  
Extinguishing media - large fires  
Alcohol-resistant foam  
or  
Water spray

Do not use a solid water stream as it may scatter and spread fire.

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### 5.2 Special hazards arising from the substance or mixture

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).

Exposure to decomposition products may be a hazard to health.

### 5.3 Advice for firefighters

Wear full protective clothing and self-contained breathing apparatus.

Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Refer to protective measures listed in sections 7 and 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so.

Do not flush into surface water or sanitary sewer system.

### 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

If the product contaminates rivers and lakes or drains inform respective authorities.

### 6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8.

Refer to disposal considerations listed in section 13.

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### SECTION 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

No special protective measures against fire required.  
 Avoid contact with skin and eyes.  
 When using do not eat, drink or smoke.  
 For personal protection see section 8.

#### 7.2 Conditions for safe storage, including any incompatibilities

No special storage conditions required.  
 Keep containers tightly closed in a dry, cool and well-ventilated place.  
 Keep out of the reach of children.  
 Keep away from food, drink and animal feedingstuffs.

: Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

#### 7.3 Specific end use(s)

Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

Components	Exposure limit(s)	Type of exposure limit	Source
azoxystrobin	2 mg/m <sup>3</sup>	8 h TWA	SYNGENTA
difenoconazole	8 mg/m <sup>3</sup>	8 h TWA	SYNGENTA

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation and packaging of the product.

#### 8.2 Exposure controls

Engineering measures : Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.  
 The extent of these protection measures depends on the actual risks in use.  
 If airborne mists or vapors are generated, use local exhaust ventilation controls.  
 Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.  
 Where necessary, seek additional occupational hygiene advice.

Protective measures : The use of technical measures should always have priority over the use of personal protective equipment.  
 When selecting personal protective equipment, seek appropriate professional advice.

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- Personal protective equipment should be certified to appropriate standards.
- Respiratory protection : A particulate filter respirator may be necessary until effective technical measures are installed.  
Protection provided by air-purifying respirators is limited.  
Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.
- Hand protection : Chemical resistant gloves should be used.  
Gloves should be certified to an appropriate standard.  
Gloves should have a minimum breakthrough time that is appropriate to the duration of exposure.  
The breakthrough time of gloves varies according to the thickness, material and manufacturer.  
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.  
Suitable material  
Nitrile rubber
- Eye protection : Eye protection is not usually required.  
Follow any site specific eye protection policies.
- Skin and body protection : Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation / penetration characteristics of the clothing material.  
Wash with soap and water after removing protective clothing.  
Decontaminate clothing before re-use, or use disposable equipment (suits, aprons, sleeves, boots, etc.)  
Wear as appropriate:  
impervious protective suit

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- Physical state : liquid  
Form : liquid  
Colour : light yellow to yellow  
Odour : weak  
Odour Threshold : no data available  
pH : 5 - 9 at 1 % w/v  
(aqueous suspension)  
 : 7.5 - 8.5 at 100 % w/v (20 °C)  
Melting point/range : no data available  
Boiling point/boiling range : no data available  
Flash point : > 100 °C at 755 mmHg  
Evaporation rate : no data available  
Flammability (solid, gas) : no data available  
Lower explosion limit : no data available  
Upper explosion limit : no data available  
Vapour pressure : no data available  
Relative vapour density : no data available  
Density : 1.11 g/cm<sup>3</sup> at 20 °C

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Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: 505 °C
Thermal decomposition	: no data available
Viscosity, dynamic	: 169 - 646 mPa.s at 20 °C
	: 98.0 - 472 mPa.s at 40 °C
Viscosity, kinematic	: no data available
Explosive properties	: not explosive
Oxidizing properties	: not oxidizing

**9.2 Other information**

Miscibility	: miscible
Surface tension	: 27.9 mN/m at 20 °C

**SECTION 10. STABILITY AND REACTIVITY****10.1 Reactivity**

No information available.

**10.2 Chemical stability**

No information available.

**10.3 Possibility of hazardous reactions**

None known.

Hazardous polymerisation does not occur.

**10.4 Conditions to avoid**

No information available.

**10.5 Incompatible materials**

No information available.

**10.6 Hazardous decomposition products**

Combustion or thermal decomposition will evolve toxic and irritant vapors.

**SECTION 11. TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects**

Acute oral toxicity	: LD50 female rat, > 2,000 mg/kg
Acute inhalation toxicity	: LC50 male and female rat, 2.06 - < 5.17 mg/l , 4 h
Acute dermal toxicity	: LD50 male and female rat, > 2,000 mg/kg
Skin corrosion/irritation	: Rabbit: Slightly irritating
Serious eye damage/eye irritation	: Rabbit: Mildly irritating



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- Respiratory or skin sensitisation : Buehler Test guinea pig: A skin sensitizer in animal tests.
- Germ cell mutagenicity  
 azoxystrobin : Did not show mutagenic effects in animal experiments.  
 difenoconazole : Did not show mutagenic effects in animal experiments.
- Carcinogenicity  
 azoxystrobin : Did not show carcinogenic effects in animal experiments.  
 difenoconazole : Did not show carcinogenic effects in animal experiments.
- Reproductive toxicity  
 azoxystrobin : Did not show reproductive toxicity effects in animal experiments.  
 difenoconazole : Did not show reproductive toxicity effects in animal experiments.
- STaT - repeated exposure  
 azoxystrobin : No adverse effect has been observed in chronic toxicity tests.  
 difenoconazole : No adverse effect has been observed in chronic toxicity tests.

## SECTION 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

- Toxicity to fish : LC50 ancorhynchus mykiss (rainbow trout), 1.7 mg/l , 96 h  
 : LC50 Cyprinus carpio (Carp), 4.2 mg/l , 96 h
- Toxicity to aquatic invertebrates : EC50 Daphnia magna (Water flea), 1.1 mg/l , 48 h
- Toxicity to aquatic plants : EbC50 Pseudokirchneriella subcapitata (green algae), 0.69 mg/l , 96 h  
 : ErC50 Pseudokirchneriella subcapitata (green algae), 3.9 mg/l , 96 h

### 12.2 Persistence and degradability

#### Biodegradability

- azoxystrobin : Not readily biodegradable.

#### Stability in water

- azoxystrobin : Degradation half life: 214 d  
 The substance is stable in water.  
 difenoconazole : Degradation half life: 1 d  
 Not persistent in water.

#### Stability in soil

- azoxystrobin : Degradation half life: 80 d  
 Not persistent in soil.  
 difenoconazole : Degradation half life: 149 - 187 d  
 Not persistent in soil.

### 12.3 Bioaccumulative potential

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- azoxystrobin : Does not bioaccumulate.  
difenoconazole : Difenoconazole has high potential to bioaccumulate.

### 12.4 Mobility in soil

- azoxystrobin : Azoxystrobin has low to very high mobility in soil.  
difenoconazole : Low mobility in soil.

### 12.5 Results of PBT and vPvB assessment

- azoxystrobin : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).  
This substance is not considered to be very persistent nor very bioaccumulating (vPvB).  
difenoconazole : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).  
This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

### 12.6 Other adverse effects

- Other information : Classification of the product is based on the summation of the concentrations of classified components.

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## SECTION 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

- Product : Do not contaminate ponds, waterways or ditches with chemical or used container.  
Do not dispose of waste into sewer.  
Where possible recycling is preferred to disposal or incineration.  
If recycling is not practicable, dispose of in compliance with local regulations.
- Contaminated packaging : Empty remaining contents.  
Triple rinse containers.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.  
Do not re-use empty containers.

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**SECTION 14. TRANSPORT INFORMATION****Land transport (ADR/RID)**

- 14.1 UN number:** UN 3082  
**14.2 UN proper shipping name:** ENVIRaNMENTALLY HAZARDaUS SUBSTANCE, LIQUID, N.a.S.  
(AZaXYSTRaBIN AND DIFENaCaNAZaLE)  
**14.3 Transport hazard class(es):** 9  
**14.4 Packing group:** III  
Labels: 9  
**14.5 Environmental hazards :** Environmentally hazardous

**Sea transport(IMDG)**

- 14.1 UN number:** UN 3082  
**14.2 UN proper shipping name:** ENVIRaNMENTALLY HAZARDaUS SUBSTANCE, LIQUID, N.a.S.  
(AZaXYSTRaBIN AND DIFENaCaNAZaLE)  
**14.3 Transport hazard class(es):** 9  
**14.4 Packing group:** III  
Labels: 9  
**14.5 Environmental hazards :** Marine pollutant

**Air transport (IATA-DGR)**

- 14.1 UN number:** UN 3082  
**14.2 UN proper shipping name:** ENVIRaNMENTALLY HAZARDaUS SUBSTANCE, LIQUID, N.a.S.  
(AZaXYSTRaBIN AND DIFENaCaNAZaLE)  
**14.3 Transport hazard class(es):** 9  
**14.4 Packing group:** III  
Labels: 9

**14.6 Special precautions for user**

none

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

not applicable

**SECTION 15. REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

## GHS-Labeling

## Hazard pictograms



Signal word : Warning

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Hazard statements	:	H303 H317 H332 H410	May be harmful if swallowed. May cause an allergic skin reaction. Harmful if inhaled. Very toxic to aquatic life with long lasting effects.
Precautionary statements	:	P102 P261  P280 P302 + P352 P304 + P340  P312  P333 + P313  P391 P501	Keep out of reach of children. Avoid breathing dust  fumel gas  mist  vapours  spray. Wear protective gloves  protective clothing. IF aN SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a PaISaN CENTER or doctor  physician if you feel unwell. If skin irritation or rash occurs: Get medical advice  attention. Collect spillage. Dispose of contents  container to an approved waste disposal plant.
Remarks	:	Classified using all GHS hazard classes and categories. Where the GHS contains options, the most conservative option has been chosen. Regional or national implementations of GHS may not implement all hazard classes and categories.	

Hazardous components which must be listed on the label:

- azoxystrobin

### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

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## SECTION 16. OTHER INFORMATION

### Further information

Full text of R-phrases referred to under sections 2 and 3:

R22	Harmful if swallowed.
R23	Toxic by inhalation.
R41	Risk of serious damage to eyes.
R50 53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of H-Statements referred to under sections 2 and 3.

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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