

## AMISTAR XTRA

Version 1.2      Revision Date: 26.09.2022      SDS Number: S164828139      This version replaces all previous versions.

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Trade name : AMISTAR XTRA  
Design code : A12910C

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

Use of the Substance/Mixture : Fungicide

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

Company : Syngenta SA (Pty) Ltd  
P.O. Box 1044, No. 4 Krokodil drift Avenue  
Brits 0250  
South Africa

Telephone : +27 (0)12 2506 300

Telefax : -

E-mail address of person responsible for the SDS : sds.ame@syngenta.com

#### 1.4 Emergency telephone number

Emergency telephone number : +27 (0) 82 446 8946 (Griffon)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4	H302: Harmful if swallowed.
Acute toxicity, Category 4	H332: Harmful if inhaled.
Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 1	H410: Very toxic to aquatic life with long lasting effects.
Reproductive toxicity, Category 2	H361d: Suspected of damaging the unborn child.
Specific target organ toxicity - repeated exposure, Category 2	H373: May cause damage to organs through prolonged or repeated exposure.

#### 2.2 Label elements

##### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

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Hazard statements : H302 + H332 Harmful if swallowed or if inhaled.  
 H361d Suspected of damaging the unborn child.  
 H373 May cause damage to organs (Liver) through prolonged or repeated exposure.  
 H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**  
 P201 Obtain special instructions before use.  
 P261 Avoid breathing mist or vapours.  
 P273 Avoid release to the environment.

**Response:**  
 P308 + P313 IF exposed or concerned: Get medical advice/attention.  
 P391 Collect spillage.

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
C16-18 alcohols, ethoxylated	68439-49-6 500-212-8	Acute Tox. 4; H302 Eye Dam. 1; H318	>= 20 - < 30
azoxystrobin (ISO)	131860-33-8 607-256-00-8	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
cyproconazole (ISO)	94361-06-5 650-032-00-X 01-2120875673-42-xxxx	Acute Tox. 3; H301 Repr. 1B; H360D STOT RE 2; H373 (Liver) Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 2,5 - < 10

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		M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 1	
Residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts	68425-94-5	Skin Irrit. 2; H315 Eye Dam. 1; H318	>= 1 - < 3
1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9 613-088-00-6 01-2120761540-60-xxxx	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 <hr/> M-Factor (Acute aquatic toxicity): 1	>= 0,025 - < 0,05

For explanation of abbreviations see section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

- General advice : Have the product container, label or Safety Data Sheet with you when calling the emergency number, a poison control center or physician, or going for treatment.
- If inhaled : 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.
- In case of 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.
- In case of 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.
- If swallowed : 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 : Nonspecific

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No symptoms known or expected.

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

Treatment : There is no specific antidote available.  
Treat symptomatically.

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable 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

Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

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

Specific hazards during firefighting : 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

Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.

Further information : 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

Personal precautions : Refer to protective measures listed in sections 7 and 8.

### 6.2 Environmental precautions

Environmental precautions : Prevent further leakage or spillage if safe to do so.  
Do not flush into surface water or sanitary sewer system.  
If the product contaminates rivers and lakes or drains inform respective authorities.

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

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth,

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vermiculite) and place in container for disposal according to local / national regulations (see section 13).  
Clean contaminated surface thoroughly.  
Clean with detergents. Avoid solvents.  
Retain and dispose of contaminated wash water.

### 6.4 Reference to other sections

For disposal considerations see section 13., Refer to protective measures listed in sections 7 and 8.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on 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

Requirements for storage areas and containers : 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.

Further information on storage stability : 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)

Specific use(s) : 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

#### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
azoxystrobin (ISO)	131860-33-8	TWA	4 mg/m <sup>3</sup>	Syngenta
cyproconazole (ISO)	94361-06-5	TWA	0,4 mg/m <sup>3</sup>	Syngenta

#### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
cyproconazole (ISO)	Workers	Inhalation	Long-term systemic effects	0,544 mg/m <sup>3</sup>
	Consumers	Oral	Long-term systemic effects	0,032 mg/kg bw/day
	Consumers	Dermal	Long-term systemic effects	0,172 mg/kg bw/day

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	Consumers	Inhalation	Long-term systemic effects	0,096 mg/m <sup>3</sup>
	Workers	Dermal	Long-term systemic effects	0,48 mg/kg bw/day
1,2-benzisothiazol-3(2H)-one	Workers	Inhalation	Long-term systemic effects	6,81 mg/m <sup>3</sup>
	Workers	Dermal	Long-term systemic effects	0,966 mg/kg
	Consumers	Inhalation	Long-term systemic effects	1,2 mg/m <sup>3</sup>
	Consumers	Dermal	Long-term systemic effects	0,345 mg/kg

### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
cyproconazole (ISO)	Fresh water	0,0021 mg/l
	Freshwater - intermittent	0,00077 mg/l
	Marine water	0,00021 mg/l
	Marine water - intermittent	0,0026 mg/l
	Sewage treatment plant	3,2 mg/l
	Soil	0,011 mg/kg
	Fresh water sediment	0,5 mg/kg
1,2-benzisothiazol-3(2H)-one	Marine sediment	0,05 mg/kg
	Secondary poisoning	0,6 mg/kg
	Fresh water	0,00403 mg/l
	Marine water	0,000403 mg/l
	Sewage treatment plant	1,03 mg/l
	Fresh water sediment	0,0499 mg/kg
	Marine sediment	0,00499 mg/kg
1,2-benzisothiazol-3(2H)-one	Freshwater - intermittent	0,0011 mg/l
	Marine water - intermittent	0,000110 mg/l
	Soil	3 mg/kg

## 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.

Maintain air concentrations below occupational exposure standards.  
Where necessary, seek additional occupational hygiene advice.

### Personal protective equipment

Eye/face protection : No special protective equipment required.  
Hand protection

Material : Nitrile rubber  
Break through time : > 480 min  
Glove thickness : 0,5 mm

Remarks : Wear protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality

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- features and is different from one producer to the other. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The breakthrough time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
- Skin and body protection** : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.  
Remove and wash contaminated clothing before re-use.  
Wear as appropriate:  
Impervious clothing
- Respiratory protection** : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.  
Suitable respiratory equipment:  
Respirator with a half face mask  
The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.
- 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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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- |                             |   |
|-----------------------------|---|
| Appearance                  | : suspension  |
| Colour                      | : light yellow to yellow                              |
| Odour                       | : sweetish  |
| Odour Threshold             | : No data available                                   |
| pH                          | : 5 - 9<br>Concentration: 1 % w/v                     |
| Melting point/range         | : No data available                                   |
| Boiling point/boiling range | : No data available                                   |
| Flash point                 | : Method: Pensky-Martens closed cup<br>does not flash |
| Evaporation rate            | : No data available                                   |
| Flammability (solid, gas)   | : No data available                                   |

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Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Density	:	1,1 g/cm <sup>3</sup> (20 °C)
Solubility(ies)		
Water solubility	:	Miscible
Solubility in other solvents	:	Solvent: Water
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	455 °C
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	124 - 657 mPa.s (40 °C) 203 - 855 mPa.s (20 °C)
Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

**9.2 Other information**

Surface tension	:	29,4 mN/m, 20 °C
Particle size	:	No data available

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**SECTION 10: Stability and reactivity****10.1 Reactivity**

None reasonably foreseeable.

**10.2 Chemical stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

Hazardous reactions : No dangerous reaction known under conditions of normal use.

**10.4 Conditions to avoid**

Conditions to avoid : No decomposition if used as directed.



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**10.5 Incompatible materials**

Materials to avoid : None known.

**10.6 Hazardous decomposition products**

Hazardous decomposition products : No hazardous decomposition products are known.

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**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

Information on likely routes of exposure : Ingestion  
Inhalation  
Skin contact  
Eye contact

**Acute toxicity****Product:**

Acute oral toxicity : LD50 (Rat, female): > 500 - < 2.000 mg/kg  
Assessment: The component/mixture is moderately toxic after single ingestion.

Acute inhalation toxicity : LC50 (Rat, male and female): > 2,58 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The component/mixture is moderately toxic after short term inhalation., The substance/mixture is not toxic on inhalation as defined by dangerous goods regulations.

Acute dermal toxicity : LD50 (Rat, male and female): > 5.000 mg/kg

**Components:****C16-18 alcohols, ethoxylated:**

Acute oral toxicity : Assessment: The component/mixture is moderately toxic after single ingestion.

**azoxystrobin (ISO):**

Acute oral toxicity : LD50 (Rat, male and female): > 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat, female): 0,7 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist

Acute toxicity estimate: 0,7 mg/l  
Test atmosphere: dust/mist  
Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008

Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg

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Assessment: The substance or mixture has no acute dermal toxicity

**cyproconazole (ISO):**

- Acute oral toxicity : LD50 (Rat, male): 350 mg/kg
- Acute inhalation toxicity : LC50 (Rat, male and female): > 2,03 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute inhalation toxicity
- Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

**1,2-benzisothiazol-3(2H)-one:**

- Acute oral toxicity : LD50 (Rat, male): 670 mg/kg
- Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

**Skin corrosion/irritation****Product:**

- Species : Rabbit  
Result : No skin irritation

**Components:****azoxystrobin (ISO):**

- Species : Rabbit  
Result : No skin irritation

**cyproconazole (ISO):**

- Species : Rabbit  
Result : No skin irritation

**Residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:**

- Method : in vitro skin corrosion test  
Result : Irritating to skin.

**1,2-benzisothiazol-3(2H)-one:**

- Species : Rabbit  
Result : Mild skin irritation

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**Serious eye damage/eye irritation****Product:**

Species : Rabbit  
Result : No eye irritation

**Components:****C16-18 alcohols, ethoxylated:**

Result : Irreversible effects on the eye

**azoxystrobin (ISO):**

Species : Rabbit  
Result : No eye irritation

**cyproconazole (ISO):**

Species : Rabbit  
Result : No eye irritation

**Residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:**

Method : in vitro eye irritation test  
Result : Risk of serious damage to eyes.

**1,2-benzisothiazol-3(2H)-one:**

Species : Rabbit  
Result : Risk of serious damage to eyes.

**Respiratory or skin sensitisation****Product:**

Test Type : Buehler Test  
Species : Guinea pig  
Result : Did not cause sensitisation on laboratory animals.

**Components:****azoxystrobin (ISO):**

Species : Guinea pig  
Result : Did not cause sensitisation on laboratory animals.

**cyproconazole (ISO):**

Species : Guinea pig  
Result : Did not cause sensitisation on laboratory animals.

**1,2-benzisothiazol-3(2H)-one:**

Result : Probability or evidence of skin sensitisation in humans

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### Germ cell mutagenicity

#### Components:

##### **azoxystrobin (ISO):**

Germ cell mutagenicity-Assessment : Animal testing did not show any mutagenic effects.

##### **cyproconazole (ISO):**

Germ cell mutagenicity-Assessment : Animal testing did not show any mutagenic effects.

##### **1,2-benzisothiazol-3(2H)-one:**

Germ cell mutagenicity-Assessment : Weight of evidence does not support classification as a germ cell mutagen.

### Carcinogenicity

#### Components:

##### **azoxystrobin (ISO):**

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

##### **cyproconazole (ISO):**

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

### Reproductive toxicity

#### Components:

##### **azoxystrobin (ISO):**

Reproductive toxicity - Assessment : No toxicity to reproduction

##### **cyproconazole (ISO):**

Reproductive toxicity - Assessment : Some evidence of adverse effects on development, based on animal experiments.

### STOT - repeated exposure

#### Components:

##### **azoxystrobin (ISO):**

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

##### **cyproconazole (ISO):**

Target Organs Assessment : Liver  
 : The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

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### SECTION 12: Ecological information

#### 12.1 Toxicity

##### Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1,8 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1,2 mg/l  
Exposure time: 48 h

Toxicity to algae/aquatic plants : ErC50 (Raphidocelis subcapitata (freshwater green alga)): 4,27 mg/l  
Exposure time: 96 h

NOEC (Raphidocelis subcapitata (freshwater green alga)): 0,25 mg/l  
End point: Growth rate  
Exposure time: 96 h

##### Components:

##### **azoxystrobin (ISO):**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,47 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,28 mg/l  
Exposure time: 48 h

EC50 (Americamysis): 0,055 mg/l  
Exposure time: 96 h

Toxicity to algae/aquatic plants : ErC50 (Raphidocelis subcapitata (freshwater green alga)): 2 mg/l  
Exposure time: 96 h

NOEC (Raphidocelis subcapitata (freshwater green alga)): 0,038 mg/l  
End point: Growth rate  
Exposure time: 96 h

ErC50 (Navicula pelliculosa (Freshwater diatom)): 0,301 mg/l  
Exposure time: 96 h

NOEC (Navicula pelliculosa (Freshwater diatom)): 0,02 mg/l  
End point: Growth rate  
Exposure time: 96 h

M-Factor (Acute aquatic toxicity) : 10

Toxicity to microorganisms : IC50 (Pseudomonas putida): > 3,2 mg/l  
Exposure time: 6 h

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- Toxicity to fish (Chronic toxicity) : NOEC: 0,16 mg/l  
Exposure time: 28 d  
Species: Oncorhynchus mykiss (rainbow trout)
- NOEC: 0,147 mg/l  
Exposure time: 33 d  
Species: Pimephales promelas (fathead minnow)
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,044 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)
- NOEC: 0,0095 mg/l  
Exposure time: 28 d  
Species: Americamysis
- M-Factor (Chronic aquatic toxicity) : 10
- cyproconazole (ISO):**
- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 19 mg/l  
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 26 mg/l  
Exposure time: 48 h
- Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 0,077 mg/l  
Exposure time: 96 h
- NOEC (Desmodesmus subspicatus (green algae)): 0,021 mg/l  
Exposure time: 96 h
- ErC50 (Lemna gibba (gibbous duckweed)): > 0,2 mg/l  
Exposure time: 7 d
- NOEC (Lemna gibba (gibbous duckweed)): 0,025 mg/l  
End point: Growth rate  
Exposure time: 7 d
- M-Factor (Acute aquatic toxicity) : 10
- Toxicity to fish (Chronic toxicity) : NOEC: 0,305 mg/l  
Exposure time: 93 d  
Species: Oncorhynchus mykiss (rainbow trout)
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,023 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)
- M-Factor (Chronic aquatic toxicity) : 1
- 1,2-benzisothiazol-3(2H)-one:**
- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2,18 mg/l  
Exposure time: 96 h

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- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2,94 mg/l  
Exposure time: 48 h
- Toxicity to algae/aquatic plants : ErC50 (Raphidocelis subcapitata (freshwater green alga)): 0,15 mg/l  
Exposure time: 72 h
- EC10 (Raphidocelis subcapitata (freshwater green alga)): 0,04 mg/l  
End point: Growth rate  
Exposure time: 72 h
- M-Factor (Acute aquatic toxicity) : 1
- Toxicity to fish (Chronic toxicity) : NOEC: 0,3 mg/l  
Exposure time: 28 d  
Species: Oncorhynchus mykiss (rainbow trout)
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 1,7 mg/l  
Exposure time: 21 d  
Species: Daphnia (water flea)

### 12.2 Persistence and degradability

#### Components:

##### **azoxystrobin (ISO):**

- Biodegradability : Result: Not readily biodegradable.
- Stability in water : Degradation half life: 214 d  
Remarks: The substance is stable in water.

##### **cyproconazole (ISO):**

- Biodegradability : Result: Not readily biodegradable.
- Stability in water : Degradation half life: 5 d (20 °C)  
Remarks: Product is not persistent.

##### **Residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:**

- Biodegradability : Result: Not readily biodegradable.

##### **1,2-benzisothiazol-3(2H)-one:**

- Biodegradability : Result: rapidly degradable

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**12.3 Bioaccumulative potential****Components:****azoxystrobin (ISO):**

Bioaccumulation : Remarks: Does not bioaccumulate.

**cyproconazole (ISO):**

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n-octanol/water : log Pow: 3,1 (25 °C)

**1,2-benzisothiazol-3(2H)-one:**

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

**12.4 Mobility in soil****Components:****azoxystrobin (ISO):**

Distribution among environmental compartments : Remarks: Azoxystrobin has low to very high mobility in soil.

Stability in soil : Dissipation time: 80 d  
Percentage dissipation: 50 % (DT50)  
Remarks: Product is not persistent.

**cyproconazole (ISO):**

Distribution among environmental compartments : Remarks: Low to medium mobility in soil.

Stability in soil : Dissipation time: 100 - 124 d  
Percentage dissipation: 50 % (DT50)  
Remarks: Product is not persistent.

**12.5 Results of PBT and vPvB assessment****Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**Components:****azoxystrobin (ISO):**

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**1,2-benzisothiazol-3(2H)-one:**

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating



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(vPvB).

### 12.6 Other adverse effects

**Product:**

Endocrine disrupting potential : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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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

### 14.1 UN number

UNRTDG : UN 3082  
IMDG : UN 3082  
IATA : UN 3082

### 14.2 UN proper shipping name

UNRTDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(AZOXYSTROBIN, CYPROCONAZOLE)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(AZOXYSTROBIN AND CYPROCONAZOLE)

IATA : Environmentally hazardous substance, liquid, n.o.s.  
(AZOXYSTROBIN AND CYPROCONAZOLE)

### 14.3 Transport hazard class(es)

UNRTDG : 9

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**IMDG** : 9

**IATA** : 9

### 14.4 Packing group

#### UNRTDG

Packing group : III

Labels : 9

#### IMDG

Packing group : III

Labels : 9

EmS Code : F-A, S-F

#### IATA (Cargo)

Packing instruction (cargo aircraft) : 964

Packing instruction (LQ) : Y964

Packing group : III

Labels : Miscellaneous

#### IATA (Passenger)

Packing instruction (passenger aircraft) : 964

Packing instruction (LQ) : Y964

Packing group : III

Labels : Miscellaneous

### 14.5 Environmental hazards

#### IMDG

Marine pollutant : yes

#### IATA (Passenger)

Environmentally hazardous : yes

#### IATA (Cargo)

Environmentally hazardous : yes

### 14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

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## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Other regulations:

None known.

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### 15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

## SECTION 16: Other information

### Full text of H-Statements

H301                            : Toxic if swallowed.  
 H302                            : Harmful if swallowed.  
 H315                            : Causes skin irritation.  
 H317                            : May cause an allergic skin reaction.  
 H318                            : Causes serious eye damage.  
 H331                            : Toxic if inhaled.  
 H360D                         : May damage the unborn child.  
 H373                            : May cause damage to organs through prolonged or repeated exposure.  
  
 H400                            : Very toxic to aquatic life.  
 H410                            : Very toxic to aquatic life with long lasting effects.  
 H411                            : Toxic to aquatic life with long lasting effects.

### Full text of other abbreviations

Acute Tox.                    : Acute toxicity  
 Aquatic Acute                : Short-term (acute) aquatic hazard  
 Aquatic Chronic             : Long-term (chronic) aquatic hazard  
 Eye Dam.                    : Serious eye damage  
 Repr.                         : Reproductive toxicity  
 Skin Irrit.                    : Skin irritation  
 Skin Sens.                    : Skin sensitisation  
 STOT RE                      : Specific target organ toxicity - repeated exposure

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship;

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REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

**Further information****Classification of the mixture:**

Acute Tox. 4	H302
Acute Tox. 4	H332
Aquatic Acute 1	H400
Aquatic Chronic 1	H410
Repr. 2	H361d
STOT RE 2	H373

**Classification procedure:**

Based on product data or assessment
Based on product data or assessment
Calculation method
Calculation method
Calculation method
Calculation method

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