

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**
**1.1. Product identifier**

Product form : Mixture  
 Trade name : ZOXIS  
 Product code : CA701073  
 Synonyms : Azoxystrobin 250 g/L SC

**1.2. Relevant identified uses of the substance or mixture and uses advised against**
**1.2.1. Relevant identified uses**

Main use category : Professional use  
 Industrial/Professional use spec : Pesticide  
 Agriculture.  
 Use of the substance/mixture : Fungicide

**1.2.2. Uses advised against**

No additional information available

**1.3. Details of the supplier of the safety data sheet**

Arysta LifeScience Benelux  
 Rue de Renory 26/1  
 B-4102 Ougrée - Belgium  
 T +32 (0)4 385 97 11 - F +32 (0)4 385 97 49  
[sdsin@arysta.com](mailto:sdsin@arysta.com) - <http://www.arystalifescience.com>

**1.4. Emergency telephone number**

Emergency number : Europe/Rest of the world (English): +44(0)1235 239670  
 112 (European Emergency Number)  
 USA: +1 215 207 0061 or 001866 928 0789  
 Australia: +61 2801 44558  
 People's Republic of China: + 86 10 5100 3039  
 New Zealand: +64 9929 1483

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	
United Kingdom	National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Llandough Hospital	Penarth CF64 2XX Cardiff	0344 892 0111	
United Kingdom	National Poisons Information Service Edinburgh Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA Edinburgh	0344 892 0111	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241	
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0344 892 0111	
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0344 892 0111	

**SECTION 2: Hazards identification**
**2.1. Classification of the substance or mixture**
**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Acute toxicity (inhalation:dust,mist) H332  
 Category 4  
 Skin sensitisation, Category 1 H317  
 Hazardous to the aquatic environment — H400  
 Acute Hazard, Category 1  
 Hazardous to the aquatic environment — H410  
 Chronic Hazard, Category 1  
 Full text of H statements : see section 16

# ZOXIS

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### Adverse physicochemical, human health and environmental effects

Harmful if inhaled. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



CLP Signal word

: Warning

Hazardous ingredients

: azoxystrobin (ISO), methyl (E)-2-{{2-[6-(2-cyanophenoxy)pyrimidin-4-yloxy]phenyl}}-3-methoxyacrylate

Hazard statements (CLP)

: H317 - May cause an allergic skin reaction.  
H332 - Harmful if inhaled.  
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP)

: P261 - Avoid breathing spray, vapours.  
P280 - Wear eye protection, protective clothing, protective gloves, face protection.  
P302+P352 - IF ON SKIN: Wash with plenty of water/...  
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P311 - Call a POISON CENTER/doctor  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P391 - Collect spillage.  
P501 - 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

EUH-statements

: EUH208 - Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.  
EUH210 - Safety data sheet available on request.  
EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
azoxystrobin (ISO), methyl (E)-2-{{2-[6-(2-cyanophenoxy)pyrimidin-4-yloxy]phenyl}}-3-methoxyacrylate	(CAS-No.) 131860-33-8 (EC Index-No.) 607-256-00-8	23.5	Acute Tox. 3 (Inhalation:dust,mist), H331 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
PROPYLENE GLYCOL substance with national workplace exposure limit(s) (GB, IE, LT, LV)	(CAS-No.) 57-55-6 (EC-No.) 200-338-0 (REACH-no) 01-2119456809-23	1 - 20	Not classified
1,2-benzisothiazol-3(2H)-one	(CAS-No.) 2634-33-5 (EC-No.) 220-120-9 (EC Index-No.) 613-088-00-6	< 0.5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410

#### Specific concentration limits:

Name	Product identifier	Specific concentration limits
1,2-benzisothiazol-3(2H)-one	(CAS-No.) 2634-33-5 (EC-No.) 220-120-9 (EC Index-No.) 613-088-00-6	(C >= 0.05) Skin Sens. 1, H317

Full text of H-statements: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- |                                       |   |  |
|---------------------------------------|---|--|
| First-aid measures general            | : | Call a poison center or a doctor if you feel unwell.   |
| First-aid measures after inhalation   | : | Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.              |
| First-aid measures after skin contact | : | Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. |
| First-aid measures after eye contact  | : | Rinse eyes with water as a precaution.   |
| First-aid measures after ingestion    | : | Call a poison center or a doctor if you feel unwell.   |

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

- |                                     |   |                                      |
|-------------------------------------|---|--------------------------------------|
| Symptoms/effects after skin contact | : | May cause an allergic skin reaction. |
|-------------------------------------|---|--------------------------------------|

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- |                              |   |  |
|------------------------------|---|--|
| Suitable extinguishing media | : | Water spray. Dry powder. Foam. Carbon dioxide. |
|------------------------------|---|--|

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

- |  |   |                              |
|--|---|------------------------------|
| Hazardous decomposition products in case of fire | : | Toxic fumes may be released. |
|--|---|------------------------------|

#### 5.3. Advice for firefighters

- |                                |   |  |
|--------------------------------|---|--|
| Protection during firefighting | : | Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |
|--------------------------------|---|--|

### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

- |                      |   |  |
|----------------------|---|--|
| Emergency procedures | : | Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. |
|----------------------|---|--|

##### 6.1.2. For emergency responders

- |                      |   |   |
|----------------------|---|---|
| Protective equipment | : | Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
|----------------------|---|---|

#### 6.2. Environmental precautions

Avoid release to the environment.

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

- |                         |   |   |
|-------------------------|---|---|
| For containment         | : | Collect spillage.   |
| Methods for cleaning up | : | Take up liquid spill into absorbent material.                 |
| Other information       | : | Dispose of materials or solid residues at an authorized site. |

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- |                               |   |   |
|-------------------------------|---|---|
| Precautions for safe handling | : | Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective equipment.   |
| Handling temperature          | : | Store at room temperature   |
| Hygiene measures              | : | Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |

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

- |                        |   |  |
|------------------------|---|--|
| Storage conditions     | : | Store in a well-ventilated place. Keep cool. |
| Maximum storage period | : | 2 year(s)                                    |

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

PROPYLENE GLYCOL (57-55-6)		
United Kingdom	Local name	Propane-1,2-diol
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ particulates 474 mg/m³ total vapour and particulates
United Kingdom	WEL TWA (ppm)	150 ppm total vapour and particulates

### 8.2. Exposure controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Hand protection:

Protective gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: off white to yellow orange.
Odour	: No data available
Odour threshold	: Not applicable Not applicable
pH	: Not applicable
Relative evaporation rate (butylacetate=1)	: Not applicable
Relative evaporation rate (ether=1)	: Not applicable
Melting point	: Not applicable
Freezing point	: Not applicable
Boiling point	: Not applicable
Flash point	: > 97 °C
Auto-ignition temperature	: 475 °C
Decomposition temperature	: Not applicable
Flammability (solid, gas)	: Not applicable
Vapour pressure	: Not applicable
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.09 g/ml
Solubility	: Miscible with water. Not applicable.
Log Pow	: Not applicable
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: No data available
Explosive limits	: Not applicable

### 9.2. Other information

Bulk density	: Not applicable
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified  
 Acute toxicity (dermal) : Not classified  
 Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

ZOXIS	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	Acute toxicity (inhalation) Not applicable
ATE CLP (dust,mist)	2.979 mg/l/4h

azoxystrobin (ISO), methyl (E)-2-{{2-[6-(2-cyanophenoxy)pyrimidin-4-yloxy]phenyl}}-3-methoxyacrylate (131860-33-8)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	0.7 mg/l/4h

PROPYLENE GLYCOL (57-55-6)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

1,2-benzisothiazol-3(2H)-one (2634-33-5)	
LD50 oral	670 mg/kg

Skin corrosion/irritation : Not classified.  
 pH: Not applicable  
 Serious eye damage/irritation : Not classified  
 pH: Not applicable  
 Respiratory or skin sensitisation : May cause an allergic skin reaction.  
 Germ cell mutagenicity : Not classified  
 Carcinogenicity : Not classified  
 Reproductive toxicity : Not classified  
 STOT-single exposure : Not classified  
 STOT-repeated exposure : Not classified  
 Aspiration hazard : Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.  
 Acute aquatic toxicity : Very toxic to aquatic life.  
 Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.  
 Not rapidly degradable

ZOXIS	
LC50 fish 1	1.2 mg/l
EC50 Daphnia 1	0.53 mg/l (48h Daphnia magna)
ErC50 (algae)	2.7 mg/l
ErC50 (other aquatic plants)	15.6 mg/l (Lemna)

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

<b>azoxystrobin (ISO), methyl (E)-2-[[2-[6-(2-cyanophenoxy)pyrimidin-4-yloxy]phenyl]]-3-methoxyacrylate (131860-33-8)</b>	
LC50 fish 1	0.47 mg/l (96h Salmo gairdneri)
EC50 Daphnia 1	0.13 mg/l (48h Macrocyclus fuscus)
EC50 other aquatic organisms 1	0.055 mg/l (96h Mysidopsis bahia)
ErC50 (algae)	0.146 mg/l (5d Navicula pelliculosa))
NOEC chronic fish	0.147 mg/l (33d Pimephales promelas)
NOEC chronic crustacea	0.0095 mg/l (28d Mysidopsis bahia)
NOEC chronic algae	0.038 mg/l (96h Selenastrum capricornutum)

<b>PROPYLENE GLYCOL (57-55-6)</b>	
LC50 fish 1	> 100 mg/l
EC50 Daphnia 1	> 100 mg/l
ErC50 (algae)	> 100 mg/l

<b>1,2-benzisothiazol-3(2H)-one (2634-33-5)</b>	
LC50 fish 1	1.3 mg/l
EC50 Daphnia 1	0.99 mg/l
ErC50 (algae)	0.084 mg/l
NOEC chronic fish	0.74 mg/l
NOEC chronic crustacea	0.7 mg/l
NOEC chronic algae	0.043 mg/l

### 12.2. Persistence and degradability

<b>azoxystrobin (ISO), methyl (E)-2-[[2-[6-(2-cyanophenoxy)pyrimidin-4-yloxy]phenyl]]-3-methoxyacrylate (131860-33-8)</b>	
Persistence and degradability	May cause long-term adverse effects in the environment.
<b>PROPYLENE GLYCOL (57-55-6)</b>	
Biochemical oxygen demand (BOD)	0.86 g O <sub>2</sub> /g substance BOD <sub>5</sub>
Chemical oxygen demand (COD)	1.585 g O <sub>2</sub> /g substance

### 12.3. Bioaccumulative potential

<b>ZOXIS</b>	
Log Pow	Not applicable
<b>azoxystrobin (ISO), methyl (E)-2-[[2-[6-(2-cyanophenoxy)pyrimidin-4-yloxy]phenyl]]-3-methoxyacrylate (131860-33-8)</b>	
BCF fish 1	21
Log Pow	2.5 (20°C)
Bioaccumulative potential	There is no bioaccumulation. Not established.
<b>PROPYLENE GLYCOL (57-55-6)</b>	
Log Pow	-1

### 12.4. Mobility in soil

<b>ZOXIS</b>	
Surface tension	32.5 mN/m
<b>azoxystrobin (ISO), methyl (E)-2-[[2-[6-(2-cyanophenoxy)pyrimidin-4-yloxy]phenyl]]-3-methoxyacrylate (131860-33-8)</b>	
Surface tension	71.8 mN/m (20°C ; 96.2% w/w)

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information




In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA
<b>14.1. UN number</b>		
3082	3082	3082
<b>14.2. UN proper shipping name</b>		
ENVIRONMENTALLY HAZARDOUS	ENVIRONMENTALLY HAZARDOUS	Environmentally hazardous substance, liquid,

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ADR	IMDG	IATA
SUBSTANCE, LIQUID, N.O.S.	SUBSTANCE, LIQUID, N.O.S.	n.o.s.
<b>Transport document description</b>		
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Azoxystrobin), 9, III, (E)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Azoxystrobin), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Azoxystrobin), 9, III
<b>14.3. Transport hazard class(es)</b>		
9	9	9
		
<b>14.4. Packing group</b>		
III	III	III
<b>14.5. Environmental hazards</b>		
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes
No supplementary information available		

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR)	: M6
Special provisions (ADR)	: 274, 335, 601
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90
Orange plates	: 

Tunnel restriction code	: E
EAC code	: •3Z

#### - Transport by sea

Special provisions (IMDG)	: 274, 335
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP2, TP29
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A

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### - Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
Special provisions (IATA)	: A97, A158
ERG code (IATA)	: 9L

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

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions  
 Contains no substance on the REACH candidate list  
 Contains no REACH Annex XIV substances

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Indication of changes:

Section	Changed item	Change	Comments
	Class (ADN)	Added	
	UN-No. (ADN)	Added	
	Packing group (IMDG)	Removed	
	Packing group (IATA)	Removed	
2.2	S-phrases	Modified	
2.2	Precautionary statements (CLP)	Modified	
3	Composition/information on ingredients	Modified	
9.1	Viscosity, kinematic	Added	
9.1	Explosive properties	Added	
9.1	Auto-ignition temperature	Added	
9.1	Oxidising properties	Added	
9.1	Viscosity, dynamic	Removed	
11.1	LC50 inhalation rat (mg/l)	Modified	
11.1	LD50 dermal rat	Modified	
12.1	EC50 Daphnia 1	Modified	
12.1	LC50 fish 1	Modified	
12.1	ErC50 (algae)	Modified	
12.1	ErC50 (other aquatic plants)	Added	
12.4	Surface tension	Added	
14.2	Proper Shipping Name (ADR)	Modified	
14.6	Limited quantities (ADR)	Added	

Full text of H- and EUH-statements:

Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Skin Sens. 1	Skin sensitisation, Category 1
H302	Harmful if swallowed.
H315	Causes skin irritation.
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.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Acute Tox. 4 (Inhalation:dust,mist)	H332	Calculation method
Skin Sens. 1	H317	Expert judgment
Aquatic Acute 1	H400	On basis of test data
Aquatic Chronic 1	H410	On basis of test data

Safety Data Sheet applicable for regions : EU - Europe;GB - United Kingdom

SDS EU (REACH Annex II)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*