



syngenta®

GROUP 3 | 11 FUNGICIDES

Product reg. no: MAPP 19119 **UFI:** 1GF4-ROOT-W002-1VSP

A suspension concentrate containing 125 g/l azoxystrobin and 125 g/l difenoconazole.

For the moderate control of Sclerotinia stem rot (*Sclerotinia sclerotiorum*) and reduction on Phoma lingam on oilseed rape.
For moderate control of Septoria leaf blotch (*Septoria tritici*) and yellow rust (*Puccinia striiformis*) on wheat.
For the control of brown rust (*Puccinia recondita*) in wheat.
For the control of *Ramularia beticola*, Cercospora leaf spot (*Cercospora beticola*) and moderate control of rust (*Uromyces betae*), powdery mildew (*Erysiphe betae*) in sugarbeet and fodder beet.

SAFETY PRECAUTIONS

(a) Operator protection

WHEN USING DO NOT EAT DRINK OR SMOKE.
WASH SPLASHES from skin and eyes immediately.
DO NOT BREATHE SPRAY.
IF YOU FEEL UNWELL, seek medical advice immediately (show label where possible).
WASH HANDS AND EXPOSED SKIN before meals and after work.

(b) Environmental protection

To protect aquatic organisms, respect an unsprayed buffer zone distance to surface water bodies in line with LERAP requirements.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5 m of the top of the bank of a static or flowing waterbody, unless a Local Environmental Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1 m of the top of a ditch which is dry at the time of application. Aim spray away from water.

5 litres



This product qualifies for inclusion within the Local Environmental Risk Assessment for Pesticides (LERAP) Scheme. Before each spraying operation from a horizontal boom sprayer or broadcast air assisted sprayer either a LERAP must be carried out in accordance with CRD published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for inspection for three years.

Do not contaminate water with the product or its container.
Do not clean application equipment near surface water.
Avoid contamination via drains from farmyards and roads.

(c) Storage and disposal

KEEP IN ORIGINAL CONTAINER, tightly closed in a safe place.
KEEP AWAY FROM FOOD DRINK AND ANIMAL FEEDING STUFFS.
KEEP OUT OF REACH OF CHILDREN.
RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of safely.
DO NOT RE-USE CONTAINER FOR ANY PURPOSE.

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

**In case of toxic or transport emergency ring
+44 (0)1484 538444 any time**

This product label is compliant with the CPA Voluntary Initiative (VI) guidance.

Syngenta UK Limited
CPC4, Capital Park, Fulbourn,
Cambridge, CB21 5XE
Tel: Cambridge (01223) 883400

**SHAKE WELL BEFORE USE.
PROTECT FROM FROST.**

Product names marked ® or ™, the ALLIANCE FRAME
the SYNGENTA Logo and the PURPOSE ICON
are Trademarks of a Syngenta Group Company



**The
Voluntary
Initiative**

L1084002 GBRI/12Z PPE 4151786

ANGLE®

A suspension concentrate containing 125 g/l azoxystrobin and 125 g/l difenoconazole

**Warning**

Harmful if swallowed.

Harmful if inhaled.

Very toxic to aquatic life with long lasting effects.

If medical advice is needed, have product container or label at hand.

Keep out of the reach of children.

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

If exposed or concerned: Get medical advice/attention.

Collect spillage.

Dispose of contents/container to a licensed hazardous-waste disposal plant/contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

To avoid risks to human health and the environment, comply with the instructions for use.

Contains 1,2-benzisothiazol-3-one. May product an allergic reaction.

MAPP 19119 UFI: 1GF4-R00T-W002-1VSP

IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL FUNGICIDE

Crop	Max. individual dose (litres of product per hectare)	Max. number of applications	Latest time of application
Winter Oilseed rape	1	2	Up to and including end of flowering (BBCH GS69)
Spring Oilseed rape	1	1	Up to and including end of flowering (BBCH GS69)
Spring and winter wheat	1	1	Up to and including end of flowering (BBCH GS69)
Sugarbeet and fodder beet	1	2	Up to and including beet root has reached harvestable size (BBCH GS49), and not less than 35 days before harvest

Other Specific Restrictions: Do not apply by hand-held equipment.

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.

DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be carefully read in order to obtain safe and successful use of this product.

RESTRICTIONS

Certain apple varieties are highly sensitive to azoxystrobin. As a precaution ANGLE® should not be applied when there is a risk of spray drift onto neighbouring apple crops. Spray equipment used to apply ANGLE to other crops should not be used to treat apples.

Effects on bread making, and brewing/distilling processes have not been fully tested. Consult grain merchant or processor before use.

The safety of Angle to wheat seed used for propagation has only been tested to BBCH 47, consult the manufacturer or your advisor before using at later growth stages on seed crops of wheat.

GENERAL INFORMATION

ANGLE is a suspension concentrate containing 125 g/l azoxystrobin and 125 g/l difenoconazole. ANGLE has systemic activity, with protectant properties for use in all commercial varieties of winter and spring oilseed rape, winter and spring wheat, sugarbeet and fodder beet.

DISEASES CONTROLLED

Oilseed Rape

Sclerotinia stem rot (*Sclerotinia sclerotiorum*) – moderate control

Stem canker (*Phoma lingam*) - reduction

Wheat

Septoria leaf blotch (*Septoria tritici*) moderate control

Yellow rust (*Puccinia striiformis*) - moderate control

Brown rust (*Puccinia recondita*)

Sugarbeet and fodder beet

Powdery mildew (*Erysiphe betae*) – moderate control

Rust (*Uromyces betae*) – moderate control

Ramularia leaf spot (*Ramularia beticola*)

Cercospora leaf spot (*Cercospora beticola*)

CROP SPECIFIC INFORMATION

OILSEED RAPE

Before applying ANGLE, ensure the crop is free from any stress caused by environmental or agronomic effects. Best results will be achieved from applications made as a protectant treatment following a disease risk assessment or the use of appropriate decision support systems.

WINTER OILSEED RAPE

A maximum of only two applications can be made per winter oilseed rape crop.

Stem canker (*Phoma lingam*)

Timing

Spray protectively with 1 litre of ANGLE per hectare in the Autumn for the reduction of Stem canker (*Phoma lingam*) from the 4 expanded true leaf stage (GS 14). Where appropriate, a second application can be made in the Spring from the start of stem elongation and no later than individual flower bud visible (GS 30-55).

Rate Of Use

1 litre per hectare. Two applications per crop.

Sclerotinia stem rot (*Sclerotinia sclerotiorum*) – moderate control

Timing

Spray one application protectively with 1 litre of ANGLE per hectare in the Spring for the moderate control of Sclerotinia stem rot (*Sclerotinia sclerotiorum*) from yellow bud until the end of flowering (GS 59-69).

Rate Of Use

1 litre per hectare. One application per crop.

SPRING OILSEED RAPE

A maximum of only one application can be made per spring oilseed rape crop.

Stem canker (*Phoma lingam*)

Timing

Apply 1 litre of ANGLE per hectare from stem elongation and no later than individual flower bud stage (GS 30-55).

Rate Of Use

1 litre per hectare. One application per crop

Sclerotinia stem rot (*Sclerotinia sclerotiorum*) – moderate control

Timing

Apply 1 litre of ANGLE per hectare between yellow bud and the end of flowering (GS 59-69).

Rate Of Use

1 litre per hectare. One application per crop

WHEAT

Timing

Apply 1 litre of ANGLE per hectare from first node and no later than end of flowering (GS 31-69)

Rate Of Use

1 litre per hectare. One application per crop

SUGARBEET AND FODDER BEET

Timing

Apply ANGLE at the first signs of the disease, before the disease becomes established. ANGLE gives prolonged protection from re-infection, but a second application can be applied where crops are at risk from later attacks.

Apply ANGLE only between Crop cover complete: leaves cover 90% of ground and beet root has reached harvestable size (BBCH GS39-49).

Rate Of Use

1 litre per hectare.

Two applications per crop allowing a minimum interval of 21 days between applications.

MIXING AND SPRAYING

Ensure that the sprayer is clean and correctly set to give an even application at the required volume. Half-fill the spray tank with clean water and start agitation. Shake the container and add the required amount of ANGLE to the sprayer using a filling device (e.g. induction bowl or closed transfer unit) or by direct addition to the sprayer tank.

Wash out containers thoroughly, preferably using an integrated pressure rinsing device, or manually rinse three times. Add washings to the sprayer at the time of filling. Complete filling to the required volume and continue to agitate throughout the spraying operation.

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

Volume of Water and Spraying

Apply in a recommended 200-400 litres of water per hectare using a medium quality spray (BCPC) at a pressure of at least 2 bar. Apply through conventional crop spraying equipment.

After Spraying

Thoroughly wash out sprayer according to the manufacturer's guidelines and dispose of washings and clear containers according to DEFRA Code of Practice and local water authority guidelines

RESISTANCE MANAGEMENT

ANGLE contains azoxystrobin, a strobilurin belonging to the Quinone outside inhibitors (QoI) (FRAC group 11) and difenoconazole, a demethylation inhibitor (DMI) fungicide (FRAC group 3). The number of QoI containing applications should be no more than ½ (50%) of the total number of fungicide applications per season.

Strains of Light Leaf Spot resistant to DMI fungicides are known to exist. To avoid development of resistance, apply product protectively in response to disease forecasts and should not be relied upon for its curative potential.

Where possible, when Light Leaf Spot is present, avoid the use of DMI based fungicides when targeting other diseases such as Sclerotinia at mid flowering.

Use ANGLE as part of an Integrated Crop Management (ICM) strategy incorporating other methods of control, including where appropriate other fungicides with a different mode of action.

To avoid the likelihood of resistance developing, application of ANGLE should be made with due regard to current FRAG-UK guidelines for QoI compounds. Do not apply more than a total of two applications, when used as part of a programme.

This product is to be used only in accordance with the recommendations and instructions given on the labels provided with this pack.

Section 6 of the Health and Safety at Work Act **Additional Product Safety Information**

(This section does not form part of the product label under the Plant Protection Products Regulations 1995.)

The product label provides information on a specific pesticidal use of the product; do not use otherwise, unless you have assessed any potential hazard involved, the safety measures required and that the particular use has 'Extension of Use' approval or is otherwise permitted under the Plant Protection Products Regulations.

The information on this label is based on the best available information including data from test results.

Safety Data Sheet V1.2

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

1.1 Product Identifier

Trade name: ANGLE

Design code: A18253A

Product Registration number: MAPP 19119

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 UK Ltd
CPC4, Capital Park, Fulbourn, Cambridge, CB21 5XE
Telephone: +44 (0) 1223 883400
Telefax: +44 (0) 1223 882195
E-mail address: customer.services@syngenta.com

1.4 Emergency telephone number

Emergency phone No.: +44 1484 538444

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

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.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Hazard pictograms



Signal Word Warning

Hazard Statements	H302+H332 Harmful if swallowed or if inhaled.
	H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements	P101	If medical advice is needed, have product container or label at hand.
	P102	Keep out of reach of children.
	P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
	P264	Wash hands thoroughly after handling.
	P270	Do not eat, drink or smoke when using this product.
	P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
	P308+P313	IF exposed or concerned: Get medical advice/ attention.
	P391	Collect spillage.
	P501	Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

C16-18 alcohols, ethoxylated, azoxystrobin (ISO), difenoconazole

Additional Labelling

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

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
difenoconazole	119446-68-3	Acute Tox. 4; H302 Eye Irrit. 2; H319 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10	>= 10 - < 20
1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9 613-088-00-6 01-2120761540-60	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 3; H412 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. 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.

SECTION 5. FIRE-FIGHTING 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 fire-fighting: 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.

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, 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.

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 ³	Syngenta
difenoconazole	119446-68-3	TWA	5 mg/m ³	Syngenta

Derived No Effect Level (DNEL):

Substance name	End Use	Exposure routes	Potential health effects	Value
1,2-benzisothiazol-3(2H)-one	Workers	Inhalation	Long-term systemic effects	6.81 mg/m ³
	Workers	Dermal	Long-term systemic effects	0.966 mg/kg
	Consumers	Inhalation	Long-term systemic effects	1.2 mg/m ³
	Consumers	Dermal	Long-term systemic effects	0.345 mg/kg

Predicted No Effect Concentration (PNEC):

Substance name	Environmental Compartment	Value
1,2-benzisothiazol-3(2H)-one	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
	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 protection: No special protective equipment required.

Hand protection

Remarks: No special protective equipment required.

Skin and body protection: No special protective equipment required. Select skin and body protection based on the physical job requirements.

Respiratory protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Suitable respiratory equipment: Respirator with a particle filter (EN 143)

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	fluid
Colour:	yellowish
Odour:	No data available
Odour Threshold:	No data available
pH:	7.4 - Concentration: 100 % w/v
Melting point/range:	No data available
Boiling point/boiling range:	No data available
Flash point:Method:	Pensky-Martens closed cup does not flash
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
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:	1.094 g/cm ³
Solubility in other solvents:	No data available
Partition coefficient:	
n-octanol/water:	No data available
Auto-ignition temperature:	460 °C
Decomposition temperature:	No data available
Viscosity, dynamic:	No data available
Explosive properties:	Not explosive
Oxidizing properties:	The substance or mixture is not classified as oxidizing.

9.2 Other information

Particle size : No data available

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.

10.5 Incompatible materials

Materials to avoid: None known.

10.6 Hazardous decomposition products

Hazardous decomposition products: No hazardous decomposition products are known.

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): 1,049 mg/kg

Acute inhalation toxicity: LC50 (Rat): 1.01 - 2.58 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The substance/mixture is not toxic on inhalation as defined by dangerous goods regulations.

Acute dermal toxicity: LD50 (Rat, male and female): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal toxicity

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

Assessment: The substance or mixture has no acute dermal toxicity

difenoconazole:

Acute oral toxicity: LD50 (Rat, male and female): 1,453 mg/kg

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

Acute inhalation toxicity: LC50 (Rat, male and female): > 3,300 mg/m³
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity: LD50 (Rabbit, male and female): > 2,010 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

1,2-benzisothiazol-3(2H)-one:
LD50 (Rat, male): 670 mg/kg
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

difenoconazole:

Species: Rabbit
Result: No skin irritation

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

Species : Rabbit
Result : Mild skin irritation

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

difenoconazole:

Species: Rabbit
Result: Irritation to eyes, reversing within 7 days

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

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

Respiratory or skin sensitisation

Product:

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.

difenoconazole:

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

Germ cell mutagenicity**Components:****azoxystrobin (ISO):**

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

difenoconazole:

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.

difenoconazole:

Carcinogenicity - Assessment: Weight of evidence does not support classification as a carcinogen.

Reproductive toxicity**Components:****azoxystrobin (ISO):**

Reproductive toxicity - Assessment: No toxicity to reproduction

difenoconazole:

Reproductive toxicity - Assessment: No toxicity to reproduction

STOT - repeated exposure**Components:****azoxystrobin (ISO):**

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

Repeated dose toxicity**Components:****difenoconazole:**

Remarks: No adverse effect has been observed in chronic toxicity tests.

SECTION 12. ECOLOGICAL INFORMATION**12.1 Toxicity****Product:**

Toxicity to fish:

LC50 (*Oncorhynchus mykiss* (rainbow trout)): 1.5 mg/l
Exposure time: 96 h

Toxicity to daphnia and
other aquatic invertebrates:

EC50 (*Daphnia magna* (Water flea)): 1.8 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants:

EC50 (*Pseudokirchneriella subcapitata* (green algae)): 3.8 mg/l
Exposure time: 96 h

EC10 (*Raphidocelis subcapitata* (freshwater green alga)): 0.61 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 algae)): 2 mg/l
Exposure time: 96 h
NOEC (*Raphidocelis subcapitata* (freshwater green algae)): 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

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

difenoconazole:

Toxicity to fish:

LC50 (*Oncorhynchus mykiss* (rainbow trout)): 1.1 mg/l
Exposure time: 96 h

Toxicity to daphnia and
other aquatic invertebrates:

EC50 (*Daphnia magna* (Water flea)): 0.77 mg/l
Exposure time: 48 h
EC50 (*Americamysis*): 0.15 mg/l
Exposure time: 96 h

Toxicity to algae/aquatic plants:

EC50 (*Navicula pelliculosa* (Freshwater diatom)): 0.091 mg/l
Exposure time: 72 h
NOEC (*Navicula pelliculosa* (Freshwater diatom)): 0.053 mg/l
Exposure time: 72 h

	ErC50 (<i>Desmodesmus subspicatus</i> (green algae)): 0.0876 mg/l Exposure time: 72 h NOEC (<i>Desmodesmus subspicatus</i> (green algae)): 0.0086 mg/l Exposure time: 72 h
M-Factor (Acute aquatic toxicity):	10
Toxicity to microorganisms:	EC50 (activated sludge): > 100 mg/l Exposure time: 3 h NOEC: 0.0076 mg/l Exposure time: 34 d Species: <i>Pimephales promelas</i> (fathead minnow)
Toxicity to fish (Chronic toxicity):	
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):	NOEC: 0.0056 mg/l Exposure time: 21 d Species: <i>Daphnia magna</i> (Water flea) NOEC: 0.0023 mg/l Exposure time: 28 d Species: <i>Americamysis</i>
M-Factor	10
(Chronic aquatic toxicity):	
1,2-benzisothiazol-3(2H)-one:	
Toxicity to fish :	LC50 (<i>Oncorhynchus mykiss</i> (rainbow trout)): 2.18 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates:	EC50 (<i>Daphnia magna</i> (Water flea)): 2.94 mg/l Exposure time: 48 h Exposure time: 72 h
Toxicity to algae/aquatic plants:	ErC50 (<i>Raphidocelis subcapitata</i> (freshwater green alga)): 0.15 mg/l Exposure time: 72 h EC10 (<i>Raphidocelis subcapitata</i> (freshwater green alga)): 0.04 mg/l End point: Growth rate Exposure time: 72 h
M-Factor	1
(Acute aquatic toxicity):	
Toxicity to fish	
(Chronic toxicity):	NOEC: 0.3 mg/l Exposure time: 28 d Species: <i>Oncorhynchus mykiss</i> (rainbow trout)
Toxicity to daphnia and other aquatic invertebrates	
(Chronic toxicity):	NOEC: 1.7 mg/l Exposure time: 21 d Species: <i>Daphnia</i> (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.

difenoconazole:

Biodegradability: Result: Not readily biodegradable.

Stability in water: Degradation half life: 1 d

Remarks: Product is not persistent.

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

Biodegradability : Result: rapidly degradable

12.3 Bioaccumulative potential

Components:

azoxystrobin (ISO):

Bioaccumulation: Remarks: Does not bioaccumulate.

difenoconazole:

Bioaccumulation: Remarks: High bioaccumulation potential.

Partition coefficient: n-octanol/water: log Pow: 4.4 (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.

difenoconazole:

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

Stability in soil: Dissipation time: 149 - 187 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).

difenoconazole:

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 (vPvB).

12.6 Other adverse effects

No data available

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.

SECTION 14. TRANSPORT INFORMATION

14.1 UN number

ADR: UN 3082
RID: UN 3082
IMDG: UN 3082
IATA: UN 3082

14.2 UN proper shipping name

ADR: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(AZOXYSTROBIN AND DIFENOCONAZOLE)
RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(AZOXYSTROBIN AND DIFENOCONAZOLE)
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(AZOXYSTROBIN AND DIFENOCONAZOLE)
IATA: Environmentally hazardous substance, liquid, n.o.s.
(AZOXYSTROBIN AND DIFENOCONAZOLE)

14.3 Transport hazard class(es)

ADR: 9
RID: 9
IMDG: 9
IATA: 9

14.4 Packing group

ADR

Packing group: III
Classification Code: M6
Hazard Identification Number: 90
Labels: 9
Tunnel restriction code: (-)

RID

Packing group: III
Classification Code: M6
Hazard Identification Number: 90
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

ADR: Environmentally hazardous: yes

RID: Environmentally hazardous: yes

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.

SECTION 15. REGULATORY INFORMATION

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

Relevant EU provisions transposed through retained EU law REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII): Conditions of restriction for the following entries should be considered: methanol (Number on list 69)

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59): Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer: Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast): Not applicable
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals: Not applicable
UK REACH List of substances subject to authorisation (Annex XIV): Not applicable
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. Not applicable

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

H302: Harmful if swallowed.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H319: Causes serious eye irritation

H331: Toxic if inhaled.

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:	Acute aquatic toxicity
Aquatic Chronic:	Chronic aquatic toxicity
Eye Dam.:	Serious eye damage
Eye Irrit.:	Eye irritation
Skin Irrit.:	Skin irritation
Skin Sens.:	Skin sensitisation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; 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; 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; TCSI - Taiwan Chemical Substance 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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Product names are a trademark or registered trademark of a Syngenta Group Company.

ANGLE®

A suspension concentrate containing 125 g/l azoxystrobin and 125 g/l difenoconazole

**Warning**

Harmful if swallowed.

Harmful if inhaled.

Very toxic to aquatic life with long lasting effects.

If medical advice is needed, have product container or label at hand.

Keep out of the reach of children.

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

If exposed or concerned: Get medical advice/attention.

Collect spillage.

Dispose of contents/container to a licensed hazardous-waste disposal plant/contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

To avoid risks to human health and the environment, comply with the instructions for use.

Contains 1,2-benzisothiazol-3-one. May product an allergic reaction.

MAPP 19119 **UFI:** 1GF4-R00T-W002-1VSP

IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL FUNGICIDE

Crop	Max. individual dose (litres of product per hectare)	Max. number of applications	Latest time of application
Winter Oilseed rape	1	2	Up to and including end of flowering (BBCH GS69)
Spring Oilseed rape	1	1	Up to and including end of flowering (BBCH GS69)
Spring and winter wheat	1	1	Up to and including end of flowering (BBCH GS69)
Sugarbeet and fodder beet	1	2	Up to and including beet root has reached harvestable size (BBCH GS49), and not less than 35 days before harvest

Other Specific Restrictions: Do not apply by hand-held equipment.

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.

