# TAZER

A suspension concentrate containing 250 g/L (22.9% w/w) Azoxystrobin.
A broad spectrum fungicide for the control of disease in wheat, barley, oats, rye, triticale, oilseed rape, peas, field beans, carrots, leeks, bulb onions, garlic, shallot, outdoor crops of broccoli, calabrese, Brussels sprout, cabbage, cauliflower, collards, kale, strawberries, lettuce, endive and potato.

PEEL BACK FOR DIRECTIONS FOR USE LEAFLET

**Safety Information**

**WARNING**

**Very toxic to aquatic life with long lasting effects.**
Collect spillage.
Dispose of contents/ container to a licensed hazardous waste disposal contractor or collection site except for empty triple-rinsed 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(2H)-one. May produce an allergic reaction.

**PCS No 05530**

SPECIMEN - 2019 to date

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).

**Authorisation Holder & Marketing Company**

Nufarm UK Limited
Wyke Lane, Wyke, Bradford, West Yorkshire, BD12 9EJ
United Kingdom
**Technical Helpline telephone number +44 (0)1274 694714**
**24-hour emergency telephone number +44 (0)1274 696603**

PROTECT FROM FROST
SHAKE WELL BEFORE USE
FOR PROFESSIONAL USE ONLY

**5 L**

500004386

Nufarm
Grow a better tomorrow

**IMPORTANT INFORMATION**
**FOR USE ONLY AS AN AGRICULTURAL AND HORTICULTURAL FUNGICIDE**

| Crop | Maximum Individual Dose (L product/ha) | Maximum Number of Applications (per crop) | Maximum Total Dose (L product/ha) | Latest Time of Application |
|---|---|---|---|---|
| Winter and Spring Wheat, Winter, Rye, Triticale | 1.0 | 2.0 | 2.0 | Before grain watery ripe stage (GS 71) |
| Winter and Spring Barley, Oats | 1.0 | 2.0 | 2.0 | Before beginning of flowering (GS 61) |
| Winter and Spring Oilseed rape | 1.0 | 2.0 | 2.0 | 21 days pre harvest |
| Peas (combining), field beans | 1.0 | 2.0 | 2.0 | 35 days pre harvest |
| Peas (vining) | 1.0 | 2.0 | 2.0 | 14 days pre harvest |
| Bulb onion, Garlic, Shallot, Carrots | 1.0 | 3.0 | 3.0 | 14 days pre harvest |
| Leeks | 1.0 | 3.0 | 3.0 | 21 days pre harvest |
| Outdoor crops of broccoli, Calabrese, Brussels sprouts, Cabbage, Cauliflower, Collards, Kale | 1.0 | 2.0 | 2.0 | 14 days pre harvest |
| Strawberries (outdoor & protected) | 1.0 | 3.0 | 3.0 | 3 days pre harvest |
| Lettuce, endive (outdoor & protected) | 1.0 | 2.0 | 2.0 | 14 days pre harvest |
| Potato (in-furrow application) | 3.0 | 1.0 | 3.0 | At planting |

**Method of application:**
Tractor mounted/trailed sprayer, handheld (knapsack) sprayer.
**Risk mitigation measures:**
To protect aquatic organisms respect an unsprayed buffer zone of 5m to surface water bodies.
**Other specific restrictions:**
To reduce the risk of resistance developing in target diseases the total number of applications of product containing QoI fungicides made to any cereal crop must not exceed two.
For uses on crops of broccoli, calabrese, Brussels sprouts, cabbage, cauliflower, collards, lettuce, endive and kale, a maximum total dose of 500g azoxystrobin must not be exceeded within a 12 month period on the same field.

SPECIMEN - 2019 to date

## DIRECTIONS FOR USE

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

### GENERAL INFORMATION

- TAZER contains azoxystrobin, a broad spectrum fungicide from the strobilurin group. It has systemic, translaminar and protectant properties.
- Azoxystrobin inhibits fungal respiration. Its mode of action is different from the action of other fungicidal groups. It should always be used in mixture with fungicides with other modes of action.
- TAZER shows good crop safety, disease control and maintenance of green leaf area which result in significant yield benefits.
- TAZER is best used as a protective treatment or during early stages of disease establishment. In cereals, the length of disease control is generally about 4 to 6 weeks during the period of active stem elongation, but can be more when applied at flag leaf/ear emergence.

### RESTRICTIONS

- Certain apple varieties are highly sensitive to TAZER. As a precaution TAZER should not be applied when there is a risk of spray drift onto neighbouring apple crops.
- Apply TAZER under good growing conditions with adequate soil moisture. Avoid poor growing conditions which may give less reliable results.

### DISEASES CONTROLLED

**WHEAT**
Glume blotch
Yellow Rust *(Puccinia striiformis)*
Brown Rust *(Puccinia recondita)*
Ear Diseases *(Cladosporium, Alternaria)*
Reduction in severity of take-all

**BARLEY**
Net Blotch *(Pyrenophora teres)*
Brown Rust *(Puccinia hordei)*
Leaf Blotch *(Rhynchosporium secalis)* – reduction
Reduction in severity of take-all

**OATS**
Crown rust *(Puccinia coronate)*

**RYE AND TRITICALE**
Brown Rust *(Puccinia recondita)*
Leaf Blotch *(Rhynchosporium secalis)* – reduction
Reduction in severity of take-all

**OILSEED RAPE**
Stem rot *(Sclerotinia sclerotiorum)* – moderate control
Dark leaf & pod spot *(Alternaria spp.)*

**PEAS – COMBINING AND VINING**
Leaf and pod spot *(Ascochyta pisi)* – useful reduction
Downy mildew *(Perenospora viciae)* – reduction

**FIELD BEANS, BROAD BEANS**
Rust *(Uromyces spp.)*

**CARROTS**
Alternaria Leaf Blight *(Alternaria dauci)*
Powdery Mildew *(Erysiphe polygoni)*

**LEEKS**
Leaf rust *(Puccinia porri)*
Purple blotch *(Alternaria porri)* – moderate control
White tip *(Phytophthora porri)* – moderate control

**ONIONS, GARLIC & SHALLOT**
Downy mildew *(Peronospora destructor)* – moderate control

**BRUSSELS SPROUTS, CABBAGE, CAULIFLOWER, KALE, COLLARDS, BROCCOLI AND CALABRESE**
White blister *(Albugo candida)* – moderate control
Ring spot *(Mycosphaerella brassicicola)* – moderate control
Alternaria *(Alternaria brassicae and Alternaria brassicicola)* – moderate control

**LETTUCE & ENDIVE**
Downy mildew *(Bremia spp.)*

**STRAWBERRIES**
Powdery mildew *(Sphaerotheca macularis)* – moderate control

**POTATOES (IN FURROW ONLY)**
Stem canker and Black scurf *(Rhizoctonia solani)* – reduction
Black dot *(Colletotrichum coccodes)* – reduction

**CROP SPECIFIC INFORMATION**

**RESISTANCE MANAGEMENT**
TAZER contains azoxystrobin a member of the QoI cross resistance group. TAZER should be used preventatively and should not be relied on for its curative potential. Disease control may be reduced if strains of pathogens less sensitive to azoxystrobin develop. Use TAZER 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 TAZER should be made with due regard to current FRAG guidelines for QoI compound.

**CEREALS, PEAS, FIELD BEANS, CARROTS, LEEKS, BULB ONIONS, GARLIC, SHALLOT, BRUSSELS SPROUTS, CABBAGE, CAULIFLOWER, KALE, COLLARDS, BROCCOLI, CALABRESE, LETTUCE AND ENDIVE**
Always inspect crops to assess disease development immediately before spraying. Best results will be achieved from applications made in the earliest stages of disease development or as a protectant treatment following a disease risk assessment or the use of appropriate decision support systems.

**CEREALS**
Use TAZER 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. You must not apply more than 2 foliar applications of QoI-

SPECIMEN
2019 to date

containing products to any cereal crop.
There is significant risk of widespread QoI resistance occurring in *Septoria tritici* populations in Ireland. Failure to follow resistance management action may result in reduced levels of disease control.
Strains of barley powdery mildew resistant to QoI's are common in Ireland.
Disease control may be reduced if strains of other pathogens less sensitive to azoxystrobin develop.
On cereal crops, TAZER must always be used in mixture with another product, recommended for control of the same target disease that contains a fungicide from a different cross resistance group and is applied at a dose that will give robust control.
Users should refer to current FRAC guidelines for QoI compounds.

**PEAS (COMBINING AND VINING)**
To avoid the likelihood of resistance developing, application of TAZER should be made with due regard to current FRAC guidelines for QoI compounds. Do not make more than **2** applications of TAZER to crops of combining and vining peas..

**FIELD BEANS**
To avoid the likelihood of resistance developing, application of TAZER should be made with due regard to current FRAC guidelines for QoI compounds. Do not make more than **2** applications of TAZER to crops of field beans. Use TAZER 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.

**BULB ONIONS, LEEKS AND CARROTS**
Use TAZER 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 TAZER should be made with due regard to current FRAC guidelines for QoI compounds. Do not apply more than a total of **3** applications when used in mixture with a fungicide from a different cross resistance group, as part of a programme. Do not apply more than a total of **2** applications if TAZER is used as a solo product.

**POTATO**
The risk of resistance developing to TAZER in *Rhizoctonia solani* (Black scurf and Stem canker) is considered to be very low. The resistance risk is higher for Colletotrichum coccodes (Black dot) and to minimise this potential risk, tubers from crops treated with TAZER should not be used for seed. TAZER should only be used in potato crops, which adhere to good rotation practices.

**BRUSSELS SPROUTS, CABBAGE, CAULIFLOWER, KALE, COLLARDS, BROCCOLI AND CALABRESE**
To avoid the likelihood of resistance developing, application of TAZER should be made with due regard to current FRAC guidelines for QoI compound. Do not apply more than a total of **2** applications of TAZER to any brassica crop.

**STRAWBERRY**
Use TAZER 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, applications of TAZER should be made with due regard to current FRAC guidelines for QoI compounds as illustrated below in the following table:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Total number of fungicide spray applications per crop | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Maximum recommended solo QoI fungicide sprays | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| Maximum recommended QoI fungicide sprays in mixture | 1 | 2 | 2 | 2 | 2 | 2 | 2 |

No more than **3** applications of TAZER are permitted per crop.

**LETTUCE, ENDIVE**
Use TAZER 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 TAZER should be made with due regard to current FRAG-UK guidelines for QoI compounds. Do not apply more than a total of **2** applications when used as part of a programme.

**OILSEED RAPE**
To avoid the likelihood of resistance developing, application of TAZER should be made with due regard to current FRAC guidelines for QoI compounds. Do not make more than **2** applications of TAZER to crops of oilseed rape. Use TAZER 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.

**TANK MIXING**
On cereal crops, TAZER must always be used in mixture with another product, recommended for control of the same target disease that contains a fungicide from a different cross resistance group and is applied at a dose that will give robust control.

For further advice on resistance management for the QoI's contact you agronomist or specialist advisor and visit the FRAG website.

**APPLICATION RATES/TIMINGS**

**WINTER & SPRING WHEAT.**
**Timing:** Apply TAZER before the grain watery ripe stage (GS 71).
**Rate of use:** 1.0 L product/ha.
**Maximum no. applications:** 2 per crop
**Water volume:** At least 200 L water/ha. In dense crops, increase the water volume to 250–300 L water/ha to improve coverage.

**RYE AND TRITICALE**
**Timing:** Apply TAZER before the grain watery ripe stage (GS 71). Always inspect crops to assess disease development immediately before spraying. Best results will be achieved from applications made in the earliest stages of disease development or as a protectant treatment following a disease risk assessment or the use of appropriate decision support systems.
**Rate of use:** 1.0 L product/ha.
**Maximum no. applications:** 2 per crop
**Water volume:** At least 200 L water/ha. In dense crops, increase the water volume to 250–300 L water/ha to improve coverage.

SPECIMEN
2019 to date

**WINTER AND SPRING BARLEY**
**Timing:** Apply TAZER before the beginning of flowering (GS 61).
**Rate of use:** 1.0 L product/ha.
**Maximum no. applications:** 2 per crop
**Water volume:** At least 200 L water/ha. In dense crops, increase the water volume to 250–300 L water/ha to improve coverage.

**OATS**
**Growing conditions:** Apply TAZER under good growing conditions with adequate soil moisture. Avoid poor growing conditions which may give less reliable results.
**Timing:** Apply TAZER before the beginning of flowering (GS 61).
**Rate of use:** 1.0 L product/ha.
**Maximum no. applications:** 2 per crop
**Water volume:** At least 200 L water/ha. In dense crops, increase the water volume to 250-300 L water/ha to improve coverage.

**WINTER AND SPRING OILSEED RAPE**
**Growing conditions:** Before applying TAZER, 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.
**Timing:** Apply TAZER 21 days pre-harvest.
*Sclerotinia* – TAZER should be applied as a protectant spray during flowering. The optimum timing is early flowering to mid flowering (GS 60 – GS 65).
*Alternaria* – apply TAZER as a protective before disease becomes established.
**Rate of use:** 1.0 L product/ha. A second treatment may be required if disease pressure remains high.
**Maximum no. applications:** 2 per crop
**Water volume:** At least 200 L water/ha. In dense crops, increase the water volume to 250–300 L water/ha to improve coverage.

**PEAS – COMBINING AND VINING**
**Growing conditions:** Apply TAZER under good growing conditions with adequate soil moisture. Avoid poor growing conditions which may give less reliable results. TAZER should always be used at the first sign of disease development. Always inspect crops to assess disease development immediately before spraying. For optimum disease control apply TAZER before infection or as soon as disease is first seen in the crop.
**Timing:** Apply TAZER 35 days pre-harvest for combining peas. Apply TAZER 14 days pre-harvest for vining peas.
**Rate of use:** 1.0 L product/ha. A second application may be required if disease pressure remains high, especially in combining peas.
**Maximum no. applications:** 2 per crop
**Water volume:** At least 200 L water/ha. In dense crops, increase the water volume to 250-300 L water/ha to improve coverage.
**Peas for processing:** Where the crop of peas is destined for processing, consult your processor before treating with TAZER.
**Crop safety:** TAZER shows good crop safety on combining and vining peas. Before applying ensure the crop is free from any stress caused by environmental or agronomic effects. Check wax level if necessary using a Crystal Violet test.

**FIELD BEANS**
**Growing conditions:** Before applying TAZER, ensure the crop is free from any stress caused by environmental or agronomic effects. Always inspect crops to assess disease development immediately before spraying. Best results will be achieved from applications made in the earliest stage of disease development or as a protectant treatment following a disease risk assessment or the use of appropriate decision support systems.
**Timing:** Apply TAZER 35 days pre-harvest.
**Rate of use:** 1.0 L product/ha. A second application may be required if disease pressure remains high.
**Maximum no. applications:** 2 per crop
**Water volume:** At least 200 L water/ha. In dense crops, increase the water volume to 250-300 L water/ha to improve coverage.

**BULB ONIONS, GARLIC, SHALLOT, LEEKS AND CARROTS**
**Growing conditions:** Before applying TAZER ensure the crop is free from any stress caused by environmental or agronomic effects. For optimum disease control TAZER should be used at the first sign of disease infection or preferably preventatively when a predictive assessment shows conditions favourable for disease development. Always inspect crops to assess disease development immediately before spraying.
**Timing:** Bulb Onions, Garlic, Shallot: Apply TAZER 14 days pre-harvest. Apply from BBCH 14 – 48. For optimum downy mildew control a 7 to 10 day spray interval should be maintained.
Leeks: Apply TAZER 21 days pre-harvest.
Carrots: Apply TAZER 14 days pre-harvest.
**Rate of use:** 1.0 L product/ha.
**Maximum no. applications:** 3 per crop
**Water volume:** At least 200 L water/ha. In dense crops, increase water volume to 250-300 L water/ha to improve coverage.
**Processing:** Where the crop is destined for processing, consult your processor before treating with TAZER.

**OUTDOOR CROPS OF BROCCOLI, CALABRESE, BRUSSELS SPROUT, CABBAGE, CAULIFLOWER, COLLARDS, KALE**
**Growing conditions:** Before applying TAZER, ensure the crop is free from any stress caused by environmental or agronomic effects. Always inspect crops to assess disease development immediately before spraying. Best results will be achieved from applications made in the earliest stage of disease development or as a protectant treatment following a disease risk assessment or the use of appropriate decision support systems.
**Timing:** Apply TAZER 14 days pre-harvest.
**Rate of use:** 1.0 L product/ha. A second treatment may be required if disease pressure remains high. A minimum interval of 12 days must be observed between applications to brassicae.
**Maximum no. applications:** 2 per crop
**Water volume:** At least 300 L water/ha.

**STRAWBERRIES (OUTDOOR & PROTECTED)**
**Growing conditions:** For optimum results apply TAZER as a protectant spray at the beginning of flowering. Two further applications can be made if disease pressure remains high. Application should be made in sequence with other products as part of a fungicide programme during flowering at a minimum interval of 7 days.
**Timing:** Apply TAZER 3 days pre-harvest. Strawberries can be treated from BBCH 51-89.
**Rate of use:** 1.0 L product/ha.
**Maximum no. applications:** 3 per crop. A minimum interval of 7 days must be observed between applications.

SPECIMEN
2019 to date

**Water volume:** At least 300 L water/ha.

**LETTUCE, ENDIVE (OUTDOOR & PROTECTED)**
**Growing conditions:** Before applying TAZER, ensure the crop is free from any stress caused by environmental or agronomic effects. Always inspect crops to assess disease development immediately before spraying. Best results will be achieved from applications made in the earliest stage of disease development or as a protectant treatment following a disease risk assessment or the use of appropriate decision support systems.
**Timing:** Apply TAZER 14 days pre-harvest. Lettuce and endive can be treated from BBCH 14 – 49.
**Rate of use:** 1.0 L product/ha.
**Maximum no. applications:** 2 per crop. A minimum interval of 7 days must be observed between applications.
**Water volume:** At least 300 L water/ha.

**POTATO (IN-FURROW)**
**Timing:** Apply TAZER at planting. It is important to direct the spray into the planting furrow and not onto the seed tuber. Application should be made using two nozzles per row – one at the front of the planting share and directed down into the furrow and the second, at the rear of the share and directed so as to spray the soil as it closes around the planted tuber.
**Rate of use:** 3.0 L prod uct/ha.
**Maximum no. applications:** 1 per crop
**Water volume:** Use between 50 – 150 L water/ha. Apply using specialist in-furrow application equipment.

**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 TAZER 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 (e.g. during meal breaks or overnight).

Apply using a medium quality spray (BCPC) at a pressure of at least 2 bar. Apply through conventional crop spraying equipment.

Thoroughly wash out sprayer according to manufacturer's guidelines and dispose of washing and clean containers according to local water authority guidelines.

**INTEGRATED CROP MANAGEMENT**
Laboratory data indicate that when used as directed TAZER as no adverse effects on the following beneficial species.
Earthworm *(Eisenia fetida)*; Bees *(Apis and Bombus spp.)*; Parasitic Wasps *(Trichogramma cacoeciae, Aphidis spp. and Encarsia formosa)*; Aphid Predators *(Coccinella septempuncata, Chrysoperla carnea, Episyrphus balteatus)*; Predatory mites *(Phytoseiulus persimilis, Amblyseius degenerans)*; Spider *(Pardosa spp.)*; Predatory bugs *(Macrolophus caliginosus, Orius laevigatus)*; Carabid Beetle *(Poecilus cupreus)*.

**COMPATIBILITY**
TAZER can be tank-mixed with other pesticides, please consult your Nufarm distributor or Nufarm UK Limited.

## COMPANY ADVISORY INFORMATION

**ACKNOWLEDGEMENTS**
®TAZER is the registered trademark of Nufarm
**TERMS AND CONDITIONS OF SUPPLY, SALE OR USE**
All goods supplied by Nufarm UK Ltd. are high grade and we believe them to be suitable for the purpose for which we expressly supply them: but as we cannot exercise any control over their mixing, use or application which may affect the performance of the goods all conditions and warranties statutory or otherwise as to the quality or fitness for any purpose of our goods are excluded and no responsibility will be accepted by us or our Associate Companies for any damage or injury whatsoever arising from their storage, handling, re-application or use. These conditions cannot be varied by our staff, our agents or the re-sellers of the product whether or not they supervise or assist in the use of such goods.

## SAFETY DATA SHEET

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**
**1.1. Product identifier**

| | |
|---|---|
| CA Code (Nufarm) | 2702 |
| Oracle Recipe Code (Nufarm) | 600000594 |
| Item codes | 100005382 |
| Product form | Mixture |
| Trade name | TAZER |
| Type (Nufarm) | Country Specific |
| Country (Nufarm) | Ireland |

**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: | Fungicide |
| Use of the substance/mixture: | - |

**1.2.2. Uses advised against**
No additional information available

**1.3. Details of the supplier of the safety data sheet**
**Supplier**
Nufarm UK Limited
Wyke Lane
Wyke
BD12 9EJ Bradford - UK
T +44 (0)1274 691234 - F +44 (0) 1274691176
infouk@uk.nufarm.com

**1.4. Emergency telephone number:**
Emergency number : +44 (0)1274 696603

**2. HAZARDS IDENTIFICATION**

SPECIMEN 2019 to date

## 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hazardous to the aquatic environment
— Acute Hazard, Category 1 H400
Hazardous to the aquatic environment
— Chronic Hazard, Category 1 H410
Full text of hazard classes and H-statements : see section 16
Adverse physicochemical, human health and environmental effects
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)

GHS09

Signal word (CLP) Warning
Hazardous ingredients Azoxystrobin 250 g/L
Hazard statements (CLP) H410 - Very toxic to aquatic life with long lasting effects.
Precautionary statements (CLP): P391 - Collect spillage.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH-statements: EUH208 - Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one. May produce an allergic reaction.
EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.

## 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

## 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 | (CAS-No.) 131860-33-8 (EC Index-No.) 607-256-00-X | 23.45 | Acute Tox. 3 (Inhalation), H331 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |
| 1,2-Propanediol | (CAS-No.) 57-55-6 (EC-No.) 200-338-0 (REACH-no) 01-2119456809-23 | 10 - 15 | Not classified |
| ALCOHOLS, C16-18, ETHOXYLATED | (CAS-No.) 68439-49-6 | 5 - 10 | Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 |
| NAPTHALENE-SULPHONIC ACID, SODIUM SALT, POLYMER WITH FORMALDEHYDE | (CAS-No.) 684245-94-5 | 1 - 5 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 |
| 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one | (CAS-No.) 2634-33-5 (EC-No.) 220-120-9 (EC Index-No.) 613-088-00-6 | < 1 | Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 |

Full text of H-statements: see section 16

## 4. FIRST AID MEASURES

### 4.1. Description of first aid measures

First-aid measures after inhalation:
Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact:
After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact:
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion:
Call a poison center or a doctor if you feel unwell. Rinse mouth out with water. Do not induce vomiting.

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

Symptoms/effects after inhalation:
Inhalation may cause irritation (cough, short breathing, difficulty in breathing).
Symptoms/effects after skin contact:
May cause moderate irritation.
Symptoms/effects after eye contact:
May cause eye irritation.
Symptoms/effects after ingestion:
May cause irritation to the digestive tract. Ingestion may cause nausea and vomiting. Abdominal pain, nausea.

SPECIMEN - 2019 to date

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

## 5. FIRE-FIGHTING MEASURES
### 5.1. Extinguishing media
Suitable extinguishing media: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media: Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture
Hazardous decomposition products in case of fire: Toxic fumes may be released.
Carbon monoxide. Carbon dioxide. Nitrogen oxides. Hydrogen cyanide.

### 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.

## 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.

#### 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 materials for containment and cleaning up
For containment: Collect spillage.
Methods for cleaning: 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.

## 7. HANDLING AND STORAGE
### 7.1. Precautions for safe handling
Precautions for safe handling: Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures: 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.
Information on mixed storage: Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.
Special rules on packaging: Keep only in original container. Store in a closed container.

### 7.3. Specific end uses
Fungicide.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
### 8.1. Control parameters

| 1,2-Propanediol (57-55-6) | | |
|---|---|---|
| Ireland | Local name | Propane-1,2-diol |
| Ireland | OEL (8 hours ref) (mg/m³) | 470 mg/m³ (total vapour and particulates) 10 mg/m³ (particulate) |
| Ireland | OEL (8 hours ref) (ppm) | 150 ppm (total vapour and particulates) |
| Ireland | OEL (15 min ref) (mg/m3) | 1410 mg/m³ (calculated-total vapour and particulates) 30 mg/m³ (calculated-particulate) |
| Ireland | OEL (15 min ref) (ppm) | 450 ppm (calculated-total vapour and particulates) |
| Ireland | Regulatory reference | Code of Practice for the Chemical Agents Regulations 2018 |

### 8.2. Exposure controls
Appropriate engineering controls:
Ensure good ventilation of the work station.
Personal protective equipment:
Gloves. Protective clothing. Safety glasses.
Hand protection:
Nitrile rubber gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls:
Avoid release to the environment.

## 9. PHYSICAL AND CHEMICAL PROPERTIES
### 9.1. Information on basic physical and chemical properties

| | |
|---|---|
| Physical state: | Liquid |
| Colour: | Off-white |
| Odour: | characteristic. |
| Odour threshold: | No data available |
| pH: | 8.1 |

SPECIMEN - 2019 to date

| | |
|---|---|
| Relative evaporation rate (butylacetate=1) : | No data available |
| Melting point: | No data available |
| Freezing point: | No data available |
| Boiling point: | No data available |
| Flash point: | > 100 °C |
| Auto-ignition temperature: | > 600 °C |
| Decomposition temperature: | No data available |
| Flammability (solid, gas): | Not applicable |
| Vapour pressure: | No data available |
| Relative vapour density at 20 °C: | No data available |
| Relative density: | 1.1355 |
| Solubility: | Water: Emulsifiable in water<br>Organic solvent:soluble in most organic solvents |
| Log Pow: | No data available |
| Viscosity, kinematic: | No data available |
| Viscosity, dynamic: | 421.8 mPa·s 20°C |
| Explosive properties: | Product is not explosive |
| Oxidising properties: | Non oxidizing material according to EC criteria |
| Explosive limits: | No data available |

### 9.2. Other information
No additional information available

## 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.

## 11. TOXICOLOGICAL INFORMATION
### 11.1. Information on toxicological effects

| TAZER | |
|---|---|
| LD50 oral rat | 2500 mg/kg |
| LD50 dermal rat | > 2000 mg/kg |
| LC50 inhalation rat (mg/l) | > 2.4 mg/l/4h Maximum concentration |

| 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5) | |
|---|---|
| LD50 oral rat | 1020 mg/kg |
| LD50 oral | 1150 mg/kg mouse |
| LC50 inhalation rat (mg/l) | > 2.4 mg/l/4h Maximum concentration |
| **1,2-Propanediol (57-55-6)** | |
| LD50 oral rat | 20 g/kg |
| LD50 dermal rabbit | 20800 mg/kg |

Acute toxicity (oral): Not classified
Acute toxicity (dermal): Not classified
Acute toxicity (inhalation): Not classified
Skin corrosion/irritation: Not classified (Based on available data, the classification criteria are not met)
pH: 8.1
Serious eye damage/irritation: Not classified (Based on available data, the classification criteria are not met)
pH: 8.1
Respiratory or skin sensitisation: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard: Not classified (Based on available data, the classification criteria are not met)

## 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:

| TAZER | |
|---|---|
| LC50 96h fish | 1.39 mg/l Oncorhynchus mykiss (Rainbow trout) |
| EC50 48h crustacea | 2.19 g/l |
| EC50 72h algae | 0.681 mg/l Pseudokirchneriella subcapitata |
| NOEC (chronic) | 0.171 mg/l |

SPECIMEN
2019 to date

| | |
|---|---|
| NOEC chronic fish | 0.939 mg/l Oncorhynchus mykiss (Rainbow trout) |
| NOEC chronic algae | 0.286 mg/l Pseudokirchneriella subcapitata |
| LD50, Eisenia fetida (Earthworm) | > 2000 mg/kg |
| LD50, Oral, Apis mellifera (bee) | > 200 µg/bee (Data apply to the technically active substance) |
| LD50, Dermal, Apis mellifera (bee) | > 100 µg/bee (Data apply to the technically active substance) |
| **1,2-Propanediol (57-55-6)** | |
| LC50 96h fish | 51600 mg/l Oncorhynchus mykiss (Rainbow trout) |
| LC50 96h fish | 41 - 47 ml/l Oncorhynchus mykiss (Rainbow trout) |
| EC50 48h crustacea | > 1000 mg/l Daphnia magna (Water flea) |
| EC50 96h algae | 19000 mg/l Pseudokirchneriella subcapitata |

### 12.2. Persistence and degradability

| **TAZER** | |
|---|---|
| Persistence and degradability | Not readily biodegradable. |
| **1,2-Propanediol (57-55-6)** | |
| Biodegradation | 81 % |

### 12.3. Bioaccumulative potential

| **TAZER** | |
|---|---|
| Bioaccumulative potential | No bioaccumulation. |
| **AZOXYSTROBIN (131860-33-8)** | |
| Log Pow | 2.5 25°C |
| **1,2-Propanediol (57-55-6)** | |
| BCF fish 1 | < 1 |
| Bioconcentration factor (BCF REACH) | 0.09 |
| Log Pow | -1.07 |

### 12.4. Mobility in soil

| **TAZER** | |
|---|---|
| Mobility in soil | Adsorbs into the soil |
| Surface tension | 42.5 mN/m 25°C |

### 12.5. Results of PBT and vPvB assessment

| **TAZER** |
|---|
| This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII |
| This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |

### 12.6. Other adverse effects

No additional information available

## 13. DISPOSAL CONSIDERATIONS

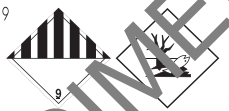
### 13.1. Waste treatment methods

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

SPECIMEN - 2019 to date

## 14. TRANSPORT INFORMATION

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

| ADR | IMDG | IATA |
|---|---|---|
| **14.1. UN number** | | |
| 3082 | 3082 | 3082 |
| **14.2. UN proper shipping name** | | |
| ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (AZOXYSTROBIN) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (AZOXYSTROBIN) | Environmentally hazardous substance, liquid, n.o.s. (AZOXYSTROBIN) |
| **Transport document description** | | |
| UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (AZOXYSTROBIN), 9, III, (-) | 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 |
| **14.3. Transport hazard class(es)** | | |
| 9   | 9   | 9   |
| **14.4. Packing group** | | |
| III | III | III |
| **14.5. Environmental hazards** | | |
| Dangerous for the environment : Yes | Dangerous for the environment : Yes Marine pollutant : Yes | Dangerous for the environment : Yes |
| No supplementary information available | | |

SPECIMEN - 2019 to date

### 14.6. Special precautions for user

Special transport precautions: Pursuant to Special Provision 375, chapter 3.3.1 of the ADR, the carriage of goods in unit packaging containing up to 5L / kg of net material, sent as single packagings or inner packages of combination packaging, is not subject to any other provisions of ADR provided the packaging complies with the requirements given under 4.1.1.1, 4.1.1.2. and from 4.1.1.4 to 4.1.1.8 ADR.

### Overland transport

| | |
|---|---|
| Classification code (ADR): | M6 |
| Special provisions (ADR): | 274, 335, 375, 601 |
| Limited quantities (ADR): | 5l |
| 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: | 90<br>3082 |
| Tunnel restriction code (ADR): | - |

### Transport by sea

| | |
|---|---|
| Special provisions (IMDG): | 274, 335, 969 |
| 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 |

### Air transport

| | |
|---|---|
| PCA Excepted quantities (IATA): | E1 |
| PCA Limited quantities (IATA): | Y964 |
| PCA limited quantity max net quantity (IATA): | 30 kgG |
| 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, A197 |
| ERG code (IATA): | 9L |

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

Not applicable

## 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

## 16. OTHER INFORMATION

Full text of H- and EUH-statements:

| | |
|---|---|
| Acute Tox. 3 (Inhalation) | Acute toxicity (inhal.), 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 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| 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. |
| 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. |
| EUH208 | Contains . May produce an allergic reaction. |
| EUH401 | To avoid risks to human health and the environment, comply with the instructions for use. |

SPECIMEN
2019 to date