

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 08.04.2024 |
| 1.1 | 08.04.2024 | 800080100181 | Date of first issue: 08.04.2024 |

Corteva Agriscience™ encourages you and expects you to read and understand the entire SDS as there is important information throughout the document. This SDS provides users with information relating to the protection of human health and safety at the workplace, protection of the environment and supports emergency response. Product users and applicators should primarily refer to the product label attached to or accompanying the product container. This Safety Data Sheet adheres to the standards and regulatory requirements of Ireland and may not meet the regulatory requirements in other countries.

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

1.1 Product identifier

Trade name : ZORVEC ENTECTA™

Unique Formula Identifier (UFI) : 19UA-K0NQ-Y006-Q8NV

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 IDENTIFICATION

Manufacturer/importer

Corteva Agriscience UK Limited
Melbourn Science Park - Cambridge Road - Unit H4, Building H
Melbourn Cambridgeshire - SG8 6HB
UNITED KINGDOM

Customer Information Number : +44 8006 89 8899
E-mail address : SDS@corteva.com

1.4 Emergency telephone number

SGS : +353 818 663 627

National Poisons Information Centre (Beaumont Hospital): 01 809 2166 (8 AM - 10 PM)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Carcinogenicity, Category 2 H351: Suspected of causing cancer.

™ ® Trademarks of Corteva Agriscience and its affiliated companies.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

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)

Hazard pictograms :



Signal word : Warning

Hazard statements : H351 Suspected of causing cancer.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

Response:

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

Disposal:

P501 Dispose of contents/container to a licensed waste disposal contractor or collection site except for empty clean triple rinsed containers which can be disposed of as non-hazardous waste.

Hazardous components which must be listed on the label:

amisulbrom (ISO)

Additional Labelling

EUH208 Contains 2-methylisothiazol-3(2H)-one, 5-chloro-2-methyl-4-isothiazolin-3-one. May produce an allergic reaction.

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

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.

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

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

| Chemical name | CAS-No. EC-No. Index-No. REACH Registration number | Classification | Concentration (% w/w) |
|--------------------------------|---|---|--------------------------|
| amisulbrom (ISO) | 348635-87-0 616-224-00-2 | Eye Irrit. 2; H319 Carc. 2; H351 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10 | 22.01 |
| oxathiapiprolin (ISO) | 1003318-67-9 613-332-00-1 | Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Chronic aquatic toxicity): 1 | 4.64 |
| White mineral oil (petroleum) | 8042-47-5 232-455-8 01-2119433307-44-0113, 01-2119487078-27 | Asp. Tox. 1; H304 | >= 10 - < 20 |
| Alcohols, C12-C15, ethoxylated | 68131-39-5 500-195-7 | Acute Tox. 4; H302 Eye Dam. 1; H318 Aquatic Chronic 3; | >= 1 - < 2.5 |

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version
1.1

Revision Date:
08.04.2024

SDS Number:
800080100181

Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

| | | | |
|--|---|---|--------------------------|
| | | H412 M-Factor (Acute aquatic toxicity): 1 | |
| Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt | 1335202-81-7 932-231-6 01-2119560592-37 | Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412 | $\geq 1 - < 2.5$ |
| 5-chloro-2-methyl-4-isothiazolin-3-one | 26172-55-4 247-500-7 | Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 2; H310 Skin Corr. 1; H314 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 1 | $\geq 0.0002 - < 0.0015$ |
| 2-methylisothiazol-3(2H)-one | 2682-20-4 220-239-6 613-326-00-9 | Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 3; H311 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH071 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 1 specific concentration limit Skin Sens. 1A; H317 $\geq 0.0015 \%$ Acute toxicity estimate Acute oral toxicity: | $\geq 0.0002 - < 0.0015$ |

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

| | | | |
|--|--|---|--|
| | | 183 mg/kg Acute inhalation toxicity (dust/mist): 0.11 mg/l Acute dermal toxicity: 242 mg/kg | |
|--|--|---|--|

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Never give anything by mouth to an unconscious person.
- If inhaled : Move to fresh air.
Artificial respiration and/or oxygen may be necessary.
Consult a physician after significant exposure.
- In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off immediately with soap and plenty of water.
In the case of skin irritation or allergic reactions see a physician.
Wash contaminated clothing before re-use.
- In case of eye contact : If easy to do, remove contact lens, if worn.
Hold eye open and rinse slowly and gently with water for 15-20 minutes.
If eye irritation persists, consult a specialist.
- If swallowed : Obtain medical attention.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
If victim is conscious:
Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No cases of human intoxication are known and the symptoms of experimental intoxication are not known.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Water spray
Alcohol-resistant foam
Carbon dioxide (CO₂)

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 08.04.2024 |
| 1.1 | 08.04.2024 | 800080100181 | Date of first issue: 08.04.2024 |

Dry chemical

Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Exposure to combustion products may be a hazard to health. Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Nitrogen oxides (NOx)
Carbon oxides

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Specific extinguishing methods : Remove undamaged containers from fire area if it is safe to do so.
Evacuate area.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Ensure adequate ventilation.
Use personal protective equipment.
Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

6.2 Environmental precautions

Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.
Discharge into the environment must be avoided.
Prevent further leakage or spillage if safe to do so.
Prevent spreading over a wide area (e.g. by containment or oil barriers).
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.
Prevent from entering into soil, ditches, sewers, underwater.
See Section 12, Ecological Information.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 08.04.2024 |
| 1.1 | 08.04.2024 | 800080100181 | Date of first issue: 08.04.2024 |

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Clean up remaining materials from spill with suitable absorbent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in.

For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, recovered material should be stored in a vented container.

The vent must prevent the ingress of water as further reaction with spilled materials can take place which could lead to over-pressurization of the container.

Keep in suitable, closed containers for disposal.

Wipe up with absorbent material (e.g. cloth, fleece).

Neutralize with chalk, alkali solution or ammonia.

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

See Section 13, Disposal Considerations, for additional information.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of aerosol.

Provide sufficient air exchange and/or exhaust in work rooms.

Handle in accordance with good industrial hygiene and safety practice.

Avoid exposure - obtain special instructions before use.

Smoking, eating and drinking should be prohibited in the application area.

Avoid inhalation of vapour or mist.

Do not swallow.

Avoid contact with skin and eyes.

Take care to prevent spills, waste and minimize release to the environment.

Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing. Keep working clothes separately. Contaminated work clothing should not be allowed out of the workplace. Wash hands and face before breaks and immediately after handling the product.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Store in a closed container. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in properly labelled containers. Store in accordance with the particular national regulations.
- Advice on common storage : Do not store near acids.
Strong oxidizing agents
- Packaging material : Unsuitable material: None known.

7.3 Specific end use(s)

- Specific use(s) : Plant protection products subject to Regulation (EC) No 1107/2009.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis |
|-------------------------------|-----------|--|----------------------------------|--------|
| White mineral oil (petroleum) | 8042-47-5 | Occupational exposure limit value (8-hour reference period) (inhalable fraction) | 5 mg/m ³ | IE OEL |
| Propanediol | 57-55-6 | Occupational exposure limit value (8-hour reference period) (particles) | 10 mg/m ³ | IE OEL |
| | | Occupational exposure limit value (8-hour reference period) (total (vapour and particles)) | 150 ppm 470 mg/m ³ | IE OEL |

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

| Substance name | End Use | Exposure routes | Potential health effects | Value |
|----------------|-----------|-----------------|----------------------------|-----------------------|
| Propanediol | Workers | Inhalation | Long-term local effects | 10 mg/m ³ |
| | Workers | Inhalation | Long-term systemic effects | 168 mg/m ³ |
| | Consumers | Inhalation | Long-term local effects | 10 mg/m ³ |
| | Consumers | Inhalation | Long-term systemic | 50 mg/m ³ |

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

| | | | effects | |
|---|-----------|--------------|----------------------------|--------------------|
| Glycerides, mixed decanoyl and octanoyl | Workers | Inhalation | Long-term systemic effects | 177.79 mg/m3 |
| | Workers | Skin contact | Long-term systemic effects | 25.21 mg/kg bw/day |
| | Consumers | Inhalation | Long-term systemic effects | 43.84 mg/m3 |
| | Consumers | Skin contact | Long-term systemic effects | 12.61 mg/kg bw/day |
| | Consumers | Ingestion | Long-term systemic effects | 12.61 mg/kg bw/day |
| Alcohols, C12-C15, ethoxylated | Workers | Inhalation | Long-term systemic effects | 294 mg/m3 |
| | Workers | Skin contact | Long-term systemic effects | 2080 mg/kg bw/day |
| | Consumers | Inhalation | Long-term systemic effects | 87 mg/m3 |
| | Consumers | Skin contact | Long-term systemic effects | 1250 mg/kg bw/day |
| | Consumers | Ingestion | Long-term systemic effects | 25 mg/kg bw/day |

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

| Substance name | Environmental Compartment | Value |
|---|----------------------------|-----------------|
| Propanediol | Fresh water | 260 mg/l |
| | Marine water | 26 mg/l |
| | Intermittent use/release | 183 mg/l |
| | Sewage treatment plant | 20000 mg/l |
| | Fresh water sediment | 572 mg/kg |
| | Marine sediment | 57.2 mg/kg |
| | Soil | 50 mg/kg |
| Glycerides, mixed decanoyl and octanoyl | Oral (Secondary Poisoning) | 0.03 mg/kg food |
| Alcohols, C12-C15, ethoxylated | Fresh water | 0.0446 mg/l |
| | Marine water | 0.0446 mg/l |
| | Intermittent use/release | 0.0446 mg/l |
| | Sewage treatment plant | 10 g/L |
| | Fresh water sediment | 41.3 mg/kg |
| | Marine sediment | 41.3 mg/kg |
| | Soil | 1 mg/kg |

8.2 Exposure controls

Engineering measures

Ensure adequate ventilation, especially in confined areas.
Use sufficient ventilation to keep employee exposure below recommended limits.

Personal protective equipment

Eye/face protection : Safety glasses with side-shields conforming to EN166
Additionally wear a face shield where the possibility exists for face contact due to splashing, spraying or airborne contact with this material.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 08.04.2024 |
| 1.1 | 08.04.2024 | 800080100181 | Date of first issue: 08.04.2024 |

Hand protection

Remarks : The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Skin and body protection

: Field and greenhouse application:
Full protective clothing Type 3 (EN 14605)

Manufacturing and processing work:
Full protective clothing Type 5 + 6 (EN ISO 13982-2 / EN 13034)

Respiratory protection

: Manufacturing and processing work:
Half mask with vapour filter A1 (EN 141)

Mixer and loaders must wear:
Half mask with vapour filter A1 (EN 141)

Spray application - outdoor:
Tractor / sprayer with hood:
No personal respiratory protective equipment normally required.

Tractor / sprayer without hood:
Half mask with a particle filter FFP1 (EN149)

Backpack / knapsack sprayer:
Half mask with a particle filter P1 (EN 143).

Mechanical automatized spray application in closed tunnel:
No personal respiratory protective equipment normally required.

Protective measures

: The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
All chemical protective clothing should be visually inspected prior to use. Clothing and gloves should be replaced in case of chemical or physical damage or if contaminated.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : liquid

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

Colour : off-white

Odour : No data available

Odour Threshold : No data available

Melting point/freezing point : Not applicable

Boiling point/boiling range : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Flash point : > 100 °C

Auto-ignition temperature : No data available

pH : 3.78

Viscosity
Viscosity, dynamic : No data available

Solubility(ies)
Water solubility : insoluble

Partition coefficient: n-octanol/water : No data available

Vapour pressure : No data available

Relative density : 1.0832 (20 °C)

Density : 1.1 - 1.2 g/cm³

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 08.04.2024 |
| 1.1 | 08.04.2024 | 800080100181 | Date of first issue: 08.04.2024 |

9.2 Other information

| | | |
|----------------------|---|--|
| Explosives | : | Not explosive |
| Oxidizing properties | : | The substance or mixture is not classified as oxidizing. |
| Self-ignition | : | No data available |

SECTION 10: Stability and reactivity

10.1 Reactivity

Not classified as a reactivity hazard.

10.2 Chemical stability

No decomposition if stored and applied as directed.
Stable under normal conditions.

10.3 Possibility of hazardous reactions

| | | |
|---------------------|---|---|
| Hazardous reactions | : | Stable under recommended storage conditions. No hazards to be specially mentioned. |
|---------------------|---|---|

10.4 Conditions to avoid

| | | |
|---------------------|---|-------------|
| Conditions to avoid | : | None known. |
|---------------------|---|-------------|

10.5 Incompatible materials

| | | |
|--------------------|---|------------------------------|
| Materials to avoid | : | Strong acids Strong bases |
|--------------------|---|------------------------------|

10.6 Hazardous decomposition products

Carbon oxides

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product:

| | | |
|---------------------------|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 5,000 mg/kg Method: OECD Test Guideline 423 Symptoms: No deaths occurred at this concentration. Remarks: Information source: Internal study report |
| Acute inhalation toxicity | : | LC50 (Rat, male and female): > 5.2 mg/l Exposure time: 4 h |

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

Test atmosphere: dust/mist
Method: OECD Test Guideline 436
Remarks: Information source: Internal study report

Acute dermal toxicity : LD50 (Rat, female): > 5,000 mg/kg
Method: OECD Test Guideline 402
Symptoms: No deaths occurred at this concentration.

Components:

amisulbrom (ISO):

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 2.85 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg

oxathiapiprolin (ISO):

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat): > 5.1 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg

White mineral oil (petroleum):

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : Remarks: Mist may cause irritation of upper respiratory tract (nose and throat).
Vapors are unlikely due to physical properties.
Excessive exposure to mineral oil mist may cause lung injury (lipoid pneumonia).
Excessive exposure may cause:
Incoordination.

LC50 (Rat, male and female): > 5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

tion toxicity

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Method: OECD Test Guideline 402
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute dermal toxicity

Alcohols, C12-C15, ethoxylated:

Acute oral toxicity : LD50 (Rat): > 1,000 mg/kg
Method: Estimated.

Acute inhalation toxicity : LC50 (Rat): 1.6 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: For similar material(s):

Remarks: Brief exposure (minutes) is not likely to cause adverse effects.

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

Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt:

Acute oral toxicity : LD50 (Rat, female): 4,445 mg/kg

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

5-chloro-2-methyl-4-isothiazolin-3-one:

Acute oral toxicity : LD50 (Rat): 64 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0.33 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): 87.12 mg/kg

2-methylisothiazol-3(2H)-one:

Acute oral toxicity : LD50 (Rat, female): 183 mg/kg
Method: OECD Test Guideline 401

LD50 (Rat, male): 235 mg/kg
Method: OECD Test Guideline 401

Acute toxicity estimate: 183 mg/kg
Method: Calculation method

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

Acute inhalation toxicity : LC50 (Rat): 0.11 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute toxicity estimate: 0.11 mg/l
Test atmosphere: dust/mist
Method: Calculation method

Acute dermal toxicity : LD50 (Rat): 242 mg/kg
Method: OECD Test Guideline 402

Acute toxicity estimate: 242 mg/kg
Method: Calculation method

Skin corrosion/irritation

Product:

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation
GLP : yes
Remarks : Information source: Internal study report

Components:

amisulbrom (ISO):

Species : Rabbit
Result : No skin irritation

oxathiapiprolin (ISO):

Species : Rabbit
Result : No skin irritation

Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt:

Species : Rabbit
Result : Skin irritation

5-chloro-2-methyl-4-isothiazolin-3-one:

Species : Rabbit
Result : Corrosive

2-methylisothiazol-3(2H)-one:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Corrosive

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

Serious eye damage/eye irritation

Product:

Species : Rabbit
Method : OECD Test Guideline 405
Result : No eye irritation
Remarks : Information source: Internal study report

Components:

amisulbrom (ISO):

Species : Rabbit
Result : Eye irritation

oxathiapiprolin (ISO):

Species : Rabbit
Result : No eye irritation

Alcohols, C12-C15, ethoxylated:

Species : Rabbit
Result : Corrosive

Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt:

Species : Rabbit
Result : Corrosive

5-chloro-2-methyl-4-isothiazolin-3-one:

Species : Rabbit
Result : Corrosive

2-methylisothiazol-3(2H)-one:

Species : Rabbit
Result : Corrosive

Respiratory or skin sensitisation

Product:

Test Type : Local lymph node assay (LLNA)
Species : Mouse
Assessment : Does not cause skin sensitisation.
Method : OECD Test Guideline 429
Remarks : Information source: Internal study report

Components:

amisulbrom (ISO):

Remarks : For skin sensitization:
Did not cause allergic skin reactions when tested in guinea

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

pigs.

Remarks : For respiratory sensitization:
No relevant data found.

oxathiapiprolin (ISO):

Test Type : Maximisation Test
Species : Guinea pig
Result : Does not cause skin sensitisation.

White mineral oil (petroleum):

Remarks : Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:
No relevant data found.

Alcohols, C12-C15, ethoxylated:

Remarks : Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:
No relevant data found.

Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt:

Species : Guinea pig
Assessment : Does not cause skin sensitisation.

5-chloro-2-methyl-4-isothiazolin-3-one:

Species : Guinea pig
Result : May cause sensitisation by skin contact.

2-methylisothiazol-3(2H)-one:

Species : Guinea pig
Assessment : The product is a skin sensitizer, sub-category 1A.
Method : OECD Test Guideline 406
Remarks : Has caused allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:
No relevant data found.

Germ cell mutagenicity

Components:

amisulbrom (ISO):

Germ cell mutagenicity- Assessment : In vitro tests did not show mutagenic effects, In vivo tests did not show mutagenic effects

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

oxathiapiprolin (ISO):

Germ cell mutagenicity- Assessment : Animal genetic toxicity studies were negative.

White mineral oil (petroleum):

Germ cell mutagenicity- Assessment : In vitro genetic toxicity studies were negative.

Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt:

Germ cell mutagenicity- Assessment : In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

5-chloro-2-methyl-4-isothiazolin-3-one:

Germ cell mutagenicity- Assessment : In vitro genetic toxicity studies were negative in some cases and positive in other cases., Animal genetic toxicity studies were negative.

2-methylisothiazol-3(2H)-one:

Germ cell mutagenicity- Assessment : Negative in genetic toxicity tests.

Carcinogenicity

Components:

amisulbrom (ISO):

Carcinogenicity - Assessment : Suspected human carcinogens

Has caused cancer in laboratory animals.

oxathiapiprolin (ISO):

Carcinogenicity - Assessment : Did not cause cancer in laboratory animals.

White mineral oil (petroleum):

Carcinogenicity - Assessment : Did not cause cancer in laboratory animals.

5-chloro-2-methyl-4-isothiazolin-3-one:

Carcinogenicity - Assessment : Did not cause cancer in laboratory animals.

2-methylisothiazol-3(2H)-one:

Carcinogenicity - Assessment : Did not cause cancer in laboratory animals.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

ment

Reproductive toxicity

Components:

amisulbrom (ISO):

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction. Did not cause birth defects in laboratory animals.

oxathiapiprolin (ISO):

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction. Animal testing did not show any effects on foetal development.

White mineral oil (petroleum):

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction. Did not cause birth defects in laboratory animals.

Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt:

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction. Did not cause birth defects or any other fetal effects in laboratory animals.

5-chloro-2-methyl-4-isothiazolin-3-one:

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction.

2-methylisothiazol-3(2H)-one:

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction. Did not cause birth defects in laboratory animals.

STOT - single exposure

Product:

Assessment : Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Components:

amisulbrom (ISO):

Assessment : Available data are inadequate to determine single exposure specific target organ toxicity.

oxathiapiprolin (ISO):

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

White mineral oil (petroleum):

Assessment : Available data are inadequate to determine single exposure specific target organ toxicity.

Alcohols, C12-C15, ethoxylated:

Assessment : Available data are inadequate to determine single exposure specific target organ toxicity.

5-chloro-2-methyl-4-isothiazolin-3-one:

Assessment : Evaluation of available data suggests that this material is not an STOT-SE toxicant.

STOT - repeated exposure

Product:

Assessment : Evaluation of available data suggests that this material is not an STOT-RE toxicant.

Components:

oxathiapiprolin (ISO):

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

Repeated dose toxicity

Components:

amisulbrom (ISO):

Remarks : Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

oxathiapiprolin (ISO):

Remarks : Based on available data, repeated exposures are not expected to cause significant adverse effects except at very high aerosol concentrations. Repeated excessive aerosol exposures may cause respiratory tract irritation and even death.

White mineral oil (petroleum):

Remarks : Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.

Alcohols, C12-C15, ethoxylated:

Remarks : Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 08.04.2024 |
| 1.1 | 08.04.2024 | 800080100181 | Date of first issue: 08.04.2024 |

Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt:

Remarks : Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

5-chloro-2-methyl-4-isothiazolin-3-one:

Remarks : Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

2-methylisothiazol-3(2H)-one:

Remarks : Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.

Aspiration toxicity

Product:

No aspiration toxicity classification

Components:

amisulbrom (ISO):

Based on physical properties, not likely to be an aspiration hazard.

oxathiapiprolin (ISO):

Based on available information, aspiration hazard could not be determined.

White mineral oil (petroleum):

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Alcohols, C12-C15, ethoxylated:

Based on available information, aspiration hazard could not be determined.

Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt:

Based on physical properties, not likely to be an aspiration hazard.

5-chloro-2-methyl-4-isothiazolin-3-one:

Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury.

2-methylisothiazol-3(2H)-one:

Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

11.2 Information on other hazards

Endocrine disrupting properties

Product:

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

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 99 mg/l
Exposure time: 96 h
Remarks: Information source: Internal study report

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna): 4.84 mg/l
Exposure time: 48 h
Test Type: semi-static test
Method: OECD Test Guideline 202
Remarks: Information source: Internal study report

Toxicity to algae/aquatic plants : ErC50 (Raphidocelis subcapitata (freshwater green alga)): > 100 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
Remarks: Information source: Internal study report

EyC50 (Raphidocelis subcapitata (freshwater green alga)): 0.573 mg/l
Test Type: static test
Method: OECD Test Guideline 201

NOEC (Raphidocelis subcapitata (freshwater green alga)): 0.00640 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201

Toxicity to soil dwelling organisms : EC50: 221 mg/kg
Species: Eisenia fetida (earthworms)
Method: OECD Test Guideline 222

Toxicity to terrestrial organisms : oral LD50: > 262 µg/bee
Exposure time: 24 h

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

Species: Apis mellifera (bees)
Method: OECD Test Guideline 213

contact LD50: > 250 µg/bee
Exposure time: 24 h
Species: Apis mellifera (bees)
Method: OECD Test Guideline 214

oral LD50: > 262 µg/bee
Exposure time: 48 h
Species: Apis mellifera (bees)
Method: OECD Test Guideline 213

contact LD50: > 250 µg/bee
Exposure time: 48 h
Species: Apis mellifera (bees)
Method: OECD Test Guideline 214

Components:

amisulbrom (ISO):

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.0515 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.0368 mg/l
Exposure time: 48 h
- Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 0.0225 mg/l
Exposure time: 96 h
- M-Factor (Acute aquatic toxicity) : 10
- Toxicity to fish (Chronic toxicity) : NOEC: 0.037 mg/l
Exposure time: 28 d
Species: Pimephales promelas (fathead minnow)
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.0197 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
- M-Factor (Chronic aquatic toxicity) : 10

oxathiapiprolin (ISO):

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 0.69 mg/l
Exposure time: 96 h
Test Type: Static
- LC50 (Lepomis macrochirus (Bluegill sunfish)): > 0.74 mg/l
Exposure time: 96 h

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

Test Type: Static

LC50 (Cyprinodon variegatus (sheepshead minnow)): > 0.65 mg/l

Exposure time: 96 h

Test Type: static test

Method: OPPTS 850.1075

GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.67 mg/l
Exposure time: 48 h
Test Type: Static

Toxicity to algae/aquatic plants : ErC50 (Skeletonema costatum (marine diatom)): 0.351 mg/l
Exposure time: 96 h

ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.142 mg/l

Exposure time: 96 h

Toxicity to fish (Chronic toxicity) : NOEC: 0.46 mg/l
Exposure time: 88 d
Species: Oncorhynchus mykiss (rainbow trout)

NOEC: 0.34 mg/l

Exposure time: 35 d

Species: Cyprinodon variegatus (sheepshead minnow)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.75 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Test Type: semi-static test

NOEC: 0.058 mg/l

Exposure time: 32 d

Species: Americamysis bahia (mysid shrimp)

Test Type: flow-through test

M-Factor (Chronic aquatic toxicity) : 1

Toxicity to terrestrial organisms : LD50: > 2,250 mg/kg
Species: Colinus virginianus (Bobwhite quail)
Method: OPPTS 850.2100

LD50: > 2,250 mg/kg

Species: Poephila guttata (zebra finch)

Method: OPPTS 850.2100

dietary LC50: > 5,620 mg/kg

Exposure time: 5 d

Species: Colinus virginianus (Bobwhite quail)

Method: OECD Test Guideline 205

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

dietary LC50: > 5,620 mg/kg
Exposure time: 5 d
Species: *Anas platyrhynchos* (Mallard duck)
Method: OECD Test Guideline 205

White mineral oil (petroleum):

Toxicity to fish : LC50 (*Lepomis macrochirus* (Bluegill sunfish)): > 10,000 mg/l
Exposure time: 96 h
Test Type: static test

LC50 (*Oncorhynchus mykiss* (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203

LC50 (*Leuciscus idus* (Golden orfe)): > 10,000 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : LC50 (*Daphnia magna* (Water flea)): > 100 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Alcohols, C12-C15, ethoxylated:

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): 0.14 mg/l
Exposure time: 48 h
Test Type: Static

Toxicity to algae/aquatic plants : ErC50 (*Selenastrum capricornutum* (green algae)): 0.75 mg/l
Exposure time: 72 h
Remarks: For similar material(s):

(*Pseudokirchneriella subcapitata* (microalgae)): 0.07 mg/l
End point: Not available
Exposure time: 96 h
Method: Method Not Specified.

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : NOEC: 0.28 mg/l
Exposure time: 30 d
Species: *Pimephales promelas* (fathead minnow)

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.77 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt:

Toxicity to fish : LC50 (Fish): > 1 - 10 mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2.9 mg/l
Exposure time: 48 h
Test Type: static test

Toxicity to algae/aquatic plants : EC50 (Algae): 29 mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to microorganisms : EC50 (Bacteria): 550 mg/l
Exposure time: 3 h

Toxicity to fish (Chronic toxicity) : NOEC: 0.23 mg/l
Exposure time: 72 d
Species: Fish
Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 1.18 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Test Type: flow-through test

5-chloro-2-methyl-4-isothiazolin-3-one:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.19 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203 or Equivalent

LC50 (Bluegill sunfish (Lepomis macrochirus)): 0.28 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.16 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : NOEC (Selenastrum capricornutum (green algae)): 0.0099 mg/l
End point: Growth rate

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

EC50 (Algae (*Selenastrum capricornutum*)): 0.018 mg/l
End point: Growth rate
Exposure time: 72 h

M-Factor (Acute aquatic toxicity) : 10

Toxicity to microorganisms : EC50 (Bacteria): 5.7 mg/l
Exposure time: 16 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.172000 mg/l
End point: number of offspring
Exposure time: 21 d
Species: *Daphnia magna* (Water flea)

LOEC: 0.572000 mg/l
End point: number of offspring
Exposure time: 21 d
Species: *Daphnia magna* (Water flea)

M-Factor (Chronic aquatic toxicity) : 1

2-methylisothiazol-3(2H)-one:

Toxicity to fish : LC50 (*Oncorhynchus mykiss* (rainbow trout)): 4.77 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203 or Equivalent

Toxicity to daphnia and other aquatic invertebrates : LC50 (*Daphnia magna* (Water flea)): 0.93 - 1.9 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Algae (*Selenastrum capricornutum*)): 0.158 mg/l
End point: Growth rate
Exposure time: 72 h
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 10

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.04 mg/l
Exposure time: 21 d
Species: *Daphnia magna*
Method: OECD Test Guideline 211 or Equivalent

M-Factor (Chronic aquatic toxicity) : 1

Ecotoxicology Assessment

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: Not readily biodegradable.
Estimation based on data obtained on active ingredient.

Components:

amisulbrom (ISO):

Biodegradability : Result: Not readily biodegradable.
Remarks: Material is not readily biodegradable according to OECD/EEC guidelines.

oxathiapiprolin (ISO):

Biodegradability : Result: Not readily biodegradable.

White mineral oil (petroleum):

Biodegradability : Test Type: aerobic
Concentration: 20 mg/l
Result: Not biodegradable
Biodegradation: 0 - 24 %
Exposure time: 28 d
Method: OECD Test Guideline 301B or Equivalent
Remarks: Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.
Material is inherently biodegradable (reaches > 20% biodegradation in OECD test(s) for inherent biodegradability).
10-day Window: Fail

Alcohols, C12-C15, ethoxylated:

Biodegradability : Test Type: aerobic
Inoculum: activated sludge, domestic, non-adapted
Concentration: 20 mg/l
Result: Readily biodegradable.
Biodegradation: 61 %
Exposure time: 28 d
Method: OECD Test Guideline 301B or Equivalent
Remarks: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.
10-day Window: Fail

Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 100 %
Exposure time: 28 d
Method: OECD Test Guideline 301B or Equivalent
Remarks: 10-day Window: Pass

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

5-chloro-2-methyl-4-isothiazolin-3-one:

Biodegradability : Test Type: aerobic
Concentration: 6 mg/l
Result: Readily biodegradable.
Biodegradation: 98 %
Exposure time: 2 d
Method: OECD Test Guideline 302B or Equivalent
Remarks: 10-day Window: Not applicable

2-methylisothiazol-3(2H)-one:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 98 %
Exposure time: 48 d
Method: Simulation study
Remarks: Material is expected to be readily biodegradable.

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Does not bioaccumulate.
Estimation based on data obtained on active ingredient.

Components:

amisulbrom (ISO):

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

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

oxathiapiprolin (ISO):

Bioaccumulation : Bioconcentration factor (BCF): 62

White mineral oil (petroleum):

Bioaccumulation : Species: Fish
Bioconcentration factor (BCF): 1,900

Alcohols, C12-C15, ethoxylated:

Bioaccumulation : Bioconcentration factor (BCF): 81.07
Method: Calculated.

Partition coefficient: n-octanol/water : log Pow: 3.4
Method: estimated

Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt:

Bioaccumulation : Bioconcentration factor (BCF): 2 - 1,000

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

Partition coefficient: n-octanol/water : log Pow: 2.89
Remarks: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

5-chloro-2-methyl-4-isothiazolin-3-one:

Partition coefficient: n-octanol/water : log Pow: -0.71 - 0.75
Method: Measured
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

2-methylisothiazol-3(2H)-one:

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n-octanol/water : log Pow: -0.75
Method: Measured
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

12.4 Mobility in soil

Product:

Distribution among environmental compartments : Remarks: The product is not expected to be mobile in soils.

Components:

Alcohols, C12-C15, ethoxylated:

Distribution among environmental compartments : Remarks: No relevant data found.

Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt:

Distribution among environmental compartments : Remarks: No relevant data found.

2-methylisothiazol-3(2H)-one:

Distribution among environmental compartments : Remarks: No relevant data found.

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.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 08.04.2024 |
| 1.1 | 08.04.2024 | 800080100181 | Date of first issue: 08.04.2024 |

Components:

White mineral oil (petroleum):

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).

Alcohols, C12-C15, ethoxylated:

Assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt:

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).

5-chloro-2-methyl-4-isothiazolin-3-one:

Assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

2-methylisothiazol-3(2H)-one:

Assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

12.6 Endocrine disrupting properties

Product:

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

12.7 Other adverse effects

Components:

White mineral oil (petroleum):

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Alcohols, C12-C15, ethoxylated:

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt:

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

5-chloro-2-methyl-4-isothiazolin-3-one:

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

2-methylisothiazol-3(2H)-one:

Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.
If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

SECTION 14: Transport information

14.1 UN number or ID 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.
(Oxathiapiprolin, Amisulbrom)
RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Oxathiapiprolin, Amisulbrom)
IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Oxathiapiprolin, Amisulbrom)

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

Version 1.1 Revision Date: 08.04.2024 SDS Number: 800080100181 Date of last issue: 08.04.2024
Date of first issue: 08.04.2024

IATA : Environmentally hazardous substance, liquid, n.o.s.
(Oxathiapiprolin, Amisulbrom)

14.3 Transport hazard class(es)

| | Class | Subsidiary risks |
|-------------|-------|------------------|
| 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
Remarks : Stowage category A

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 08.04.2024 |
| 1.1 | 08.04.2024 | 800080100181 | Date of first issue: 08.04.2024 |

Marine pollutant : yes(Oxathiapiprolin, Amisulbrom)

14.6 Special precautions for user

Marine Pollutants assigned UN number 3077 and 3082 in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code, IATA Special provision A197, and ADR/RID special provision 375.

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 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

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) : naphthalene

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

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. E1 ENVIRONMENTAL HAZARDS

15.2 Chemical safety assessment

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

The mixture is evaluated within the frame of the provisions of Regulation (EC) No. 1107/2009. Refer to the label for exposure assessment information.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 08.04.2024 |
| 1.1 | 08.04.2024 | 800080100181 | Date of first issue: 08.04.2024 |

SECTION 16: Other information

Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

Full text of H-Statements

| | |
|--------|---|
| H301 | : Toxic if swallowed. |
| H302 | : Harmful if swallowed. |
| H304 | : May be fatal if swallowed and enters airways. |
| H310 | : Fatal in contact with skin. |
| H311 | : Toxic in contact with skin. |
| H314 | : Causes severe skin burns and eye damage. |
| H315 | : Causes skin irritation. |
| H317 | : May cause an allergic skin reaction. |
| H318 | : Causes serious eye damage. |
| H319 | : Causes serious eye irritation. |
| H330 | : Fatal if inhaled. |
| H351 | : Suspected of causing cancer. |
| H400 | : Very toxic to aquatic life. |
| H410 | : Very toxic to aquatic life with long lasting effects. |
| H412 | : Harmful to aquatic life with long lasting effects. |
| EUH071 | : Corrosive to the respiratory tract. |

Full text of other abbreviations

| | |
|-----------------------------|--|
| Acute Tox. | : Acute toxicity |
| Aquatic Acute | : Short-term (acute) aquatic hazard |
| Aquatic Chronic | : Long-term (chronic) aquatic hazard |
| Asp. Tox. | : Aspiration hazard |
| Carc. | : Carcinogenicity |
| Eye Dam. | : Serious eye damage |
| Eye Irrit. | : Eye irritation |
| Skin Corr. | : Skin corrosion |
| Skin Irrit. | : Skin irritation |
| Skin Sens. | : Skin sensitisation |
| IE OEL | : List of Chemical Agents and Carcinogens with Occupational Exposure Limit Values - Code of Practice, Schedule 1 and 2 |
| IE OEL / OELV - 8 hrs (TWA) | : Occupational exposure limit value (8-hour reference period) |

ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; ASTM - American Society for the Testing of Materials; ECx - Concentration associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; 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; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; 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; NOEC - Non-Observed Effective Concentration; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; (Q)SAR - (Quantitative) Structure Activity Relationship; RID - Regulations con-

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, Annex II and its amendments.



ZORVEC ENTECTA™

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 08.04.2024 |
| 1.1 | 08.04.2024 | 800080100181 | Date of first issue: 08.04.2024 |

cerning the International Carriage of Dangerous Goods by Rail; SDS - Safety Data Sheet; UN - United Nations.

EC-Number - European Community number REACH - Regulation (EC) No 1907/2006 of the European Parliament and of Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.

Further information

Other information : Take notice of the directions of use on the label.

Classification of the mixture:

| | |
|-------------------|------|
| Carc. 2 | H351 |
| Aquatic Acute 1 | H400 |
| Aquatic Chronic 1 | H410 |

Classification procedure:

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

Product code: GF-3917

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.

IE / 6N