

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



Tilmicosin Formulation

| | | | |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 28.09.2024 |
| 4.0 | 14.04.2025 | 9540991-00016 | Date of first issue: 08.09.2021 |

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

1.1 Product identifier

Trade name : Tilmicosin Formulation

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

Use of the Sub-
stance/Mixture : Veterinary product

Recommended restrictions
on use : Not applicable

1.3 Details of the supplier of the safety data sheet

Company : MSD
Drynam Road
K67 P263 Dublin, Ireland

Telephone : +1-908-740-4000

E-mail address of person
responsible for the SDS : EHSDATASTEWARD@msd.com

1.4 Emergency telephone number

+1-908-423-6000

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

| | |
|--|--|
| Acute toxicity, Category 4 | H302: Harmful if swallowed. |
| Eye irritation, Category 2 | H319: Causes serious eye irritation. |
| Reproductive toxicity, Category 2 | H361: Suspected of damaging fertility or the unborn child. |
| Specific target organ toxicity - repeated exposure, Category 2 | H373: May cause damage to organs through prolonged or repeated exposure. |
| 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)




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| | | |
|--------------------------|---|---|
| Hazard pictograms | : |    |
| Signal word | : | Warning |
| Hazard statements | : | <div><div>H302</div><div>Harmful if swallowed.</div></div> <div><div>H319</div><div>Causes serious eye irritation.</div></div> <div><div>H361</div><div>Suspected of damaging fertility or the unborn child.</div></div> <div><div>H373</div><div>May cause damage to organs through prolonged or repeated exposure.</div></div> <div><div>H410</div><div>Very toxic to aquatic life with long lasting effects.</div></div> |
| Precautionary statements | : | Prevention: <div><div>P201</div><div>Obtain special instructions before use.</div></div> <div><div>P273</div><div>Avoid release to the environment.</div></div> <div><div>P280</div><div>Wear protective gloves/ protective clothing/ eye protection/ face protection.</div></div> Response: <div><div>P308 + P313</div><div>IF exposed or concerned: Get medical advice/ attention.</div></div> <div><div>P337 + P313</div><div>If eye irritation persists: Get medical advice/ attention.</div></div> <div><div>P391</div><div>Collect spillage.</div></div> |

Hazardous components which must be listed on the label:

Tilmicosin
Phosphoric acid

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. | Classification | Concentration (% w/w) |
|---------------|-------------------|----------------|--------------------------|
|---------------|-------------------|----------------|--------------------------|

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| | Index-No. Registration number | | |
|-----------------|--|---|------------------|
| Tilmicosin | 137330-13-3 | Acute Tox. 4; H302 Eye Irrit. 2; H319 Repr. 2; H361 STOT RE 2; H373 (Heart, Lungs) Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 10 | $\geq 30 - < 50$ |
| Phosphoric acid | 7664-38-2 231-633-2 015-011-00-6 | Met. Corr. 1; H290 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 EUH071 specific concentration limit Skin Corr. 1B; H314 $\geq 25\%$ Skin Irrit. 2; H315 $10 - < 25\%$ Eye Irrit. 2; H319 $10 - < 25\%$ EUH071 $\geq 25\%$ Acute toxicity esti- mate Acute oral toxicity: 2,000 mg/kg | $\geq 1 - < 3$ |

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.
When symptoms persist or in all cases of doubt seek medical advice.

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- | | | |
|----------------------------|---|---|
| Protection of first-aiders | : | First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8). |
| If inhaled | : | If inhaled, remove to fresh air. Get medical attention. |
| In case of skin contact | : | In case of contact, immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse. |
| In case of eye contact | : | In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lens, if worn. Get medical attention. |
| If swallowed | : | If swallowed, DO NOT induce vomiting. Get medical attention. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. |

4.2 Most important symptoms and effects, both acute and delayed

- | | | |
|-------|---|---|
| Risks | : | Harmful if swallowed. Causes serious eye irritation. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. |
|-------|---|---|

4.3 Indication of any immediate medical attention and special treatment needed

- | | | |
|-----------|---|---|
| Treatment | : | Treat symptomatically and supportively. |
|-----------|---|---|

SECTION 5: Firefighting measures

5.1 Extinguishing media

- | | | |
|--------------------------------|---|--|
| Suitable extinguishing media | : | Water spray Alcohol-resistant foam Carbon dioxide (CO ₂) 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. |
|---------------------------------------|---|--|

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Hazardous combustion products : Carbon oxides
Nitrogen oxides (NO_x)
Oxides of phosphorus

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).

6.2 Environmental precautions

Environmental precautions : Avoid release to the environment.
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.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material.
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.
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 the cleanup of releases. You will need to determine which regulations are applicable.
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

6.4 Reference to other sections

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

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
- Local/Total ventilation : Use only with adequate ventilation.
- Advice on safe handling : Do not breathe mist or vapours.
Do not swallow.
Do not get in eyes.
Avoid prolonged or repeated contact with skin.
Wash skin thoroughly after handling.
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment
Do not eat, drink or smoke when using this product.
Take care to prevent spills, waste and minimize release to the environment.
- Hygiene measures : If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.
The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the use of administrative controls.

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep in properly labelled containers. Store locked up. Store in accordance with the particular national regulations.
- Advice on common storage : Do not store with the following product types:
Strong oxidizing agents
Gases

7.3 Specific end use(s)

- Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis |
|------------------|-------------|--------------------------------|--------------------|----------|
| Tilmicosin | 137330-13-3 | TWA | 0.2 mg/m3 (OEB 2) | Internal |
| Propylene glycol | 57-55-6 | OELV - 8 hrs (TWA) (particles) | 10 mg/m3 | IE OEL |
| | | OELV - 8 hrs | 150 ppm | IE OEL |

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| | | (TWA) (total (vapour and particles)) | 470 mg/m ³ | |
| Phosphoric acid | 7664-38-2 | TWA | 1 mg/m ³ | 2000/39/EC |
| | Further information: Indicative | | | |
| | | STEL | 2 mg/m ³ | 2000/39/EC |
| | Further information: Indicative | | | |
| | | OELV - 8 hrs (TWA) | 1 mg/m ³ | IE OEL |
| | | OELV - 15 min (STEL) | 2 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 |
|------------------|-----------|-----------------|----------------------------|------------------------|
| Phosphoric acid | Workers | Inhalation | Long-term local effects | 1 mg/m ³ |
| | Workers | Inhalation | Acute local effects | 2 mg/m ³ |
| | Consumers | Inhalation | Long-term local effects | 0.73 mg/m ³ |
| Propylene glycol | 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 effects | 50 mg/m ³ |

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

| Substance name | Environmental Compartment | Value |
|------------------|---------------------------|------------------------------|
| Propylene glycol | Fresh water | 260 mg/l |
| | Freshwater - intermittent | 183 mg/l |
| | Marine water | 26 mg/l |
| | Sewage treatment plant | 20000 mg/l |
| | Fresh water sediment | 572 mg/kg dry weight (d.w.) |
| | Marine sediment | 57.2 mg/kg dry weight (d.w.) |
| | Soil | 50 mg/kg dry weight (d.w.) |

8.2 Exposure controls

Engineering measures

Use appropriate engineering controls and manufacturing technologies to control airborne concentrations (e.g., drip-less quick connections).

All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment.

Laboratory operations do not require special containment.

Personal protective equipment

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| Eye/face protection | : | Wear safety glasses with side shields or goggles. If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles. Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols. |
| Hand protection | : | |
| Material | : | Chemical-resistant gloves |
| Skin and body protection | : | Work uniform or laboratory coat. |
| Respiratory protection | : | If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection. Filter should conform to I.S. EN 14387 |
| Filter type | : | Combined particulates, acidic and inorganic gas/vapour type (BE-P) |

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | | |
|--|---|-------------------|
| Physical state | : | liquid |
| Colour | : | dark yellow |
| Odour | : | No data available |
| Odour Threshold | : | No data available |
| Melting point/freezing point | : | No data available |
| Initial boiling point and boiling range | : | No data available |
| Flammability (solid, gas) | : | Not applicable |
| Flammability (liquids) | : | No data available |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Flash point | : | No data available |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| pH | : | 3.5 - 6.5 |

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Viscosity
Viscosity, kinematic : No data available

Solubility(ies)
Water solubility : No data available

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

Vapour pressure : No data available

Relative density : No data available

Density : 1.00 - 1.200 g/cm³

Relative vapour density : No data available

Particle characteristics
Particle size : Not applicable

9.2 Other information

Explosives : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Evaporation rate : No data available

Molecular weight : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Not classified as a reactivity hazard.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Can react with strong oxidizing agents.

10.4 Conditions to avoid

Conditions to avoid : None known.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

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10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

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

Information on likely routes of exposure :

- Inhalation
- Skin contact
- Ingestion
- Eye contact

Acute toxicity

|| Harmful if swallowed.

Product:

Acute oral toxicity : Acute toxicity estimate: 1,467 mg/kg
Method: Calculation method

Components:

Tilmicosin:

|| Acute oral toxicity : LD50 (Rat): 800 - 850 mg/kg
|| Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg
|| Acute toxicity (other routes of administration) : LD50 (Mouse): 97 mg/kg
|| Application Route: Subcutaneous
|| LD50 (Rat): 185 mg/kg
|| Application Route: Subcutaneous

Phosphoric acid:

|| Acute oral toxicity : LD50 (Rat): 2,000 mg/kg
|| Method: OECD Test Guideline 423
|| Acute inhalation toxicity : Assessment: Corrosive to the respiratory tract.

Skin corrosion/irritation

|| Not classified based on available information.

Components:

Tilmicosin:

|| Species : Rabbit
|| Result : No skin irritation

Phosphoric acid:

|| Result : Corrosive after 3 minutes to 1 hour of exposure
|| Remarks : Based on national or regional regulation.

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Serious eye damage/eye irritation

|| Causes serious eye irritation.

Components:

Tilmicosin:

| | |
|---------|-----------------------|
| Species | : Rabbit |
| Result | : Mild eye irritation |

Phosphoric acid:

| | |
|---------|-----------------------------------|
| Species | : Rabbit |
| Result | : Irreversible effects on the eye |

Respiratory or skin sensitisation

Skin sensitisation

|| Not classified based on available information.

Respiratory sensitisation

|| Not classified based on available information.

Components:

Tilmicosin:

| | |
|-----------------|--------------------------|
| Test Type | : Intracutaneous test |
| Exposure routes | : Dermal |
| Species | : Guinea pig |
| Result | : Not a skin sensitizer. |

Germ cell mutagenicity

|| Not classified based on available information.

Components:

Tilmicosin:

| | |
|-----------------------|--|
| Genotoxicity in vitro | : Test Type: Bacterial reverse mutation assay (AMES) |
| | Result: negative |
| | Test Type: Mouse Lymphoma |
| | Result: negative |
| | Test Type: unscheduled DNA synthesis assay |
| | Test system: Chinese hamster ovary cells |
| | Result: negative |
| Genotoxicity in vivo | : Test Type: sister chromatid exchange assay |
| | Species: Hamster |
| | Result: negative |
| | Test Type: Chromosomal aberration |
| | Species: Rat |
| | Result: negative |

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||

Phosphoric acid:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative

Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative

Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: negative

Carcinogenicity

|| Not classified based on available information.

Reproductive toxicity

|| Suspected of damaging fertility or the unborn child.

Components:

Tilmicosin:

Effects on fertility : Test Type: Fertility
Species: Rat
Application Route: Oral
Fertility: NOAEL: 200 mg/kg body weight

Effects on foetal development : Test Type: Development
Species: Rat
Application Route: Oral
Developmental Toxicity: NOAEL: 10 mg/kg body weight
Result: Maternal toxicity observed.

Test Type: Development
Species: Rabbit
Application Route: Oral
Developmental Toxicity: LOAEL: 8 mg/kg body weight
Result: Maternal toxicity observed., Reduced foetal weight, Skeletal and visceral variations

Reproductive toxicity - Assessment : May damage the unborn child.

Phosphoric acid:

Effects on fertility : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 422
Result: negative

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Effects on foetal development : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 422
Result: negative

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Components:

Tilmicosin:

Exposure routes : Oral
Target Organs : Heart, Lungs
Assessment : May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Components:

Tilmicosin:

Species : Rat
NOAEL : 50 mg/kg
LOAEL : 250 mg/kg
Application Route : Oral
Exposure time : 3 Months
Target Organs : Kidney, Liver, Heart, spleen, Gastrointestinal tract, Adrenal gland
Symptoms : weight loss, reduced food consumption

Species : Dog
NOAEL : 4 mg/kg
LOAEL : 12 mg/kg
Application Route : Oral
Exposure time : 12 Months
Target Organs : Heart
Symptoms : weight loss, Increased heart rate

Species : Dog
LOAEL : 47 mg/m3
Application Route : Inhalation
Exposure time : 16 d
Target Organs : Lungs

Phosphoric acid:

Species : Rat
NOAEL : 250 mg/kg

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| Application Route | : Ingestion |
| Exposure time | : 40 - 52 Days |
| Method | : OECD Test Guideline 422 |

Aspiration toxicity

Not classified based on available information.

11.2 Information on other hazards

Endocrine disrupting properties

Not classified based on available information.

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.

Experience with human exposure

Components:

Tilmicosin:

| | |
|--------------|--|
| Inhalation | : Target Organs: Gastrointestinal tract Symptoms: Nausea, Vomiting |
| Skin contact | : Target Organs: Skin Symptoms: tingling |
| Eye contact | : Target Organs: Eye Symptoms: burning or stinging of the eye, Swelling of tissue |
| Ingestion | : Target Organs: Central nervous system Symptoms: anxiety, Headache, Light-headedness, Thirst |

SECTION 12: Ecological information

12.1 Toxicity

Components:

Tilmicosin:

| | |
|---|---|
| Toxicity to fish | : LC50 (Oncorhynchus mykiss (rainbow trout)): 851 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 LC50 (Lepomis macrochirus (Bluegill sunfish)): 716 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 |
| Toxicity to daphnia and other aquatic invertebrates | : EC50 (Daphnia magna (Water flea)): 57.3 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 |

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Toxicity to algae/aquatic plants : EC50 (Selenastrum capricornutum (green algae)): 0.354 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

EC10 (Anabaena flos-aquae (cyanobacterium)): 0.008 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 1

M-Factor (Chronic aquatic toxicity) : 10

Phosphoric acid:

Toxicity to fish : LC50 (Oryzias latipes (Japanese medaka)): > 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : ErC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

NOEC (Desmodesmus subspicatus (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 : > 100 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209
Remarks: Based on data from similar materials

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Components:

Tilmicosin:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)
Bioconcentration factor (BCF): 450
Method: OECD Test Guideline 305

Partition coefficient: n-octanol/water : log Pow: 3.8

12.4 Mobility in soil

No data available

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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.

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

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

| | |
|------------------------|--|
| Product | : Dispose of in accordance with local regulations. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities. Do not dispose of waste into sewer. |
| Contaminated packaging | : Empty containers should be taken to an approved waste handling site for recycling or disposal. If not otherwise specified: Dispose of as unused product. |

SECTION 14: Transport information

14.1 UN number or ID number

| | |
|------|-----------|
| ADN | : UN 3082 |
| ADR | : UN 3082 |
| RID | : UN 3082 |
| IMDG | : UN 3082 |
| IATA | : UN 3082 |

14.2 UN proper shipping name

| | |
|-----|---|
| ADN | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tilmicosin) |
| ADR | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, |

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| | |
|-------------|--|
| | N.O.S. (Tilmicosin) |
| RID | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tilmicosin) |
| IMDG | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tilmicosin) |
| IATA | : Environmentally hazardous substance, liquid, n.o.s. (Tilmicosin) |

14.3 Transport hazard class(es)

| | Class | Subsidiary risks |
|-------------|-------|------------------|
| ADN | : 9 | |
| ADR | : 9 | |
| RID | : 9 | |
| IMDG | : 9 | |
| IATA | : 9 | |

14.4 Packing group

| | |
|--------------------------------------|------------|
| ADN | |
| Packing group | : III |
| Classification Code | : M6 |
| Hazard Identification Number | : 90 |
| Labels | : 9 |
| ADR | |
| Packing group | : III |
| Classification Code | : M6 |
| Hazard Identification Number | : 90 |
| Labels | : 9 |
| Tunnel restriction code | : (-) |
| RID | |
| Packing group | : III |
| Classification Code | : M6 |
| Hazard Identification Number | : 90 |
| Labels | : 9 |
| IMDG | |
| Packing group | : III |
| Labels | : 9 |
| EmS Code | : F-A, S-F |
| IATA (Cargo) | |
| Packing instruction (cargo aircraft) | : 964 |
| Packing instruction (LQ) | : Y964 |

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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

ADN

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

IATA (Passenger)

Environmentally hazardous : yes

IATA (Cargo)

Environmentally hazardous : yes

14.6 Special precautions for user

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

14.7 Maritime transport in bulk according to IMO instruments

Remarks : 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 - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

: Conditions of restriction for the following entries should be considered:
Number on list 3

Number on list 75: If you intend to use this product as tattoo ink, please contact your vendor.

Substance(s) or mixture(s) are listed

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here according to their appearance in the regulation, irrespective of their use/purpose or the conditions of the restriction. Please refer to the conditions in corresponding Regulation to determine whether an entry is applicable to the placing on the market or not.

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : Not applicable

Regulation (EU) No 2024/590 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

Regulation (EU) 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 | Quantity 1 100 t | Quantity 2 200 t |
|----|--------------------------|---------------------|---------------------|

Other regulations:

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

The components of this product are reported in the following inventories:

AICS : not determined

DSL : not determined

IECSC : not determined

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Other information : Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Full text of H-Statements

H290 : May be corrosive to metals.

H302 : Harmful if swallowed.

H314 : Causes severe skin burns and eye damage.

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| | |
|--------|---|
| H318 | : Causes serious eye damage. |
| H319 | : Causes serious eye irritation. |
| H361 | : Suspected of damaging fertility or the unborn child. |
| H373 | : May cause damage to organs through prolonged or repeated exposure if swallowed. |
| H400 | : Very toxic to aquatic life. |
| H410 | : Very toxic 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 |
| Eye Dam. | : Serious eye damage |
| Eye Irrit. | : Eye irritation |
| Met. Corr. | : Corrosive to metals |
| Repr. | : Reproductive toxicity |
| Skin Corr. | : Skin corrosion |
| STOT RE | : Specific target organ toxicity - repeated exposure |
| 2000/39/EC | : Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values |
| IE OEL | : Ireland. List of Chemical Agents and Carcinogens with Occupational Exposure Limit Values - Code of Practice, Schedule 1 and 2 |
| 2000/39/EC / TWA | : Limit Value - eight hours |
| 2000/39/EC / STEL | : Short term exposure limit |
| IE OEL / OELV - 8 hrs (TWA) | : Occupational exposure limit value (8-hour reference period) |
| IE OEL / OELV - 15 min (STEL) | : Occupational exposure limit value (15-minute reference period) |

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

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stance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Classification of the mixture:

| | |
|-------------------|------|
| Acute Tox. 4 | H302 |
| Eye Irrit. 2 | H319 |
| Repr. 2 | H361 |
| STOT RE 2 | H373 |
| Aquatic Acute 1 | H400 |
| Aquatic Chronic 1 | H410 |

Classification procedure:

| |
|--------------------|
| Calculation method |
| Calculation method |
| Calculation method |
| Calculation method |
| Calculation method |
| Calculation method |

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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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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