Section 1: Identification

Product name: Orbifloxacin Solid Formulation

Manufacturer or supplier's details
Company: MSD
Address: 33 Whakatiki Street - Private Bag 908
Upper Hutt - New Zealand
Telephone: 908-740-4000
Emergency telephone number: 1-908-423-6000
E-mail address: EHSDATASTEDWARD@msd.com
Telefax: 908-735-1496

Recommended use of the chemical and restrictions on use
Recommended use: Veterinary product

Section 2: Hazard identification

GHS Classification
Reproductive toxicity: Repr.2

GHS label elements
Hazard pictograms: 

Signal word: Warning

Hazard statements: H361d Suspected of damaging the unborn child.

Precautionary statements: Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P281 Use personal protective equipment as required.

Response:
P308 + P313 IF exposed or concerned: Get medical advice/attention.

Storage:
P405 Store locked up.

Disposal:
P501 Dispose of contents/ container to an approved waste
SAFETY DATA SHEET

Orbifloxacin Solid Formulation

Version 1.10  Revision Date: 23.03.2020  SDS Number: 801088-00011  Date of last issue: 13.09.2019  Date of first issue: 15.07.2016

Other hazards which do not result in classification
Dust contact with the eyes can lead to mechanical irritation.
Contact with dust can cause mechanical irritation or drying of the skin.
May form explosive dust-air mixture during processing, handling or other means.

Section 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substance / Mixture</th>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixture</td>
<td>Orbifloxacin</td>
<td>113617-63-3</td>
<td>&gt;= 3 - &lt; 10</td>
</tr>
<tr>
<td></td>
<td>Magnesium stearate</td>
<td>557-04-0</td>
<td>&lt; 10</td>
</tr>
</tbody>
</table>

Section 4: 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.

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:
If in eyes, rinse well with water.
Get medical attention if irritation develops and persists.

If swallowed:
If swallowed, DO NOT induce vomiting.
Get medical attention.
Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed:
Suspected of damaging the unborn child.
Contact with dust can cause mechanical irritation or drying of the skin.
Dust contact with the eyes can lead to mechanical irritation.

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).

Notes to physician:
Treat symptomatically and supportively.

Section 5: Fire-fighting measures

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

Unsuitable extinguishing media:
None known.

Specific hazards during fire-fighting:
Avoid generating dust; fine dust dispersed in air in sufficient disposal plant.
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<table>
<thead>
<tr>
<th>Version</th>
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<th>SDS Number:</th>
<th>Date of last issue:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.10</td>
<td>23.03.2020</td>
<td>801088-00011</td>
<td>13.09.2019</td>
</tr>
</tbody>
</table>

- **fighting concentrations**, and in the presence of an ignition source is a potential dust explosion hazard. Exposure to combustion products may be a hazard to health.

**Hazardous combustion products:** Carbon oxides, Nitrogen oxides (NOx), Metal oxides

**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.

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

### Section 6: Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.

**Environmental precautions:** Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

**Methods and materials for containment and cleaning up:** Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. 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.

### Section 7: Handling and storage

**Technical measures:** Static electricity may accumulate and ignite suspended dust causing an explosion. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.

**Local/Total ventilation Advice on safe handling:** Use only with adequate ventilation. Do not breathe dust. Do not swallow. Avoid contact with eyes. Avoid prolonged or repeated contact with skin.
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment.
Minimize dust generation and accumulation.
Keep container closed when not in use.
Keep away from heat and sources of ignition.
Take precautionary measures against static discharges.
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.

Conditions for safe storage:
- Keep in properly labelled containers.
- Store locked up.
- Store in accordance with the particular national regulations.

Materials to avoid:
- Do not store with the following product types:
- Strong oxidizing agents

### Section 8: Exposure controls/personal protection

#### Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orbifloxacin</td>
<td>113617-63-3</td>
<td>TWA</td>
<td>0.2 mg/m^3 (OEB 2)</td>
<td>Internal</td>
</tr>
<tr>
<td>Magnesium stearate</td>
<td>557-04-0</td>
<td>WES-TWA</td>
<td>10 mg/m^3</td>
<td>NZ OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Inhalable particulate matter)</td>
<td>10 mg/m^3</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable particulate matter)</td>
<td>3 mg/m^3</td>
<td>ACGIH</td>
</tr>
</tbody>
</table>

**Engineering measures:**
- Use feasible engineering controls to minimize exposure to compound.
- All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment.

**Personal protective equipment**

**Respiratory protection:**
- If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.
  - Filter type: Particulates type
Hand protection
   Material: Chemical-resistant gloves

Eye 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 face shield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols.

Skin and body protection: Work uniform or laboratory coat.

Section 9: Physical and chemical properties

Appearance: powder

Colour: No data available

Odour: No data available

Odour Threshold: No data available

pH: No data available

Melting point/freezing point: No data available

Initial boiling point and boiling range: No data available

Flash point: Not applicable

Evaporation rate: No data available

Flammability (solid, gas): May form explosive dust-air mixture during processing, handling or other means.

Flammability (liquids): No data available

Upper explosion limit / Upper flammability limit: No data available

Lower explosion limit / Lower flammability limit: No data available

Vapour pressure: No data available

Relative vapour density: No data available

Relative density: No data available

Density: No data available

Solubility(ies)
   Water solubility: No data available

Partition coefficient: n-
octanol/water
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity
  Viscosity, kinematic : No data available
Explosive properties : Not explosive
Oxidizing properties : The substance or mixture is not classified as oxidizing.
Molecular weight : No data available
Particle size : No data available

Section 10: Stability and reactivity
Reactivity : Not classified as a reactivity hazard.
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions : May form explosive dust-air mixture during processing, handling or other means. Can react with strong oxidizing agents.
Conditions to avoid : Heat, flames and sparks. Avoid dust formation.
Incompatible materials : Oxidizing agents
Hazardous decomposition products : No hazardous decomposition products are known.

Section 11: Toxicological information
Exposure routes : Inhalation
Skin contact
Ingestion
Eye contact

Acute toxicity
Not classified based on available information.

Components:
Orbifloxacin:
Acute oral toxicity : LD50 (Rat): > 3,000 mg/kg
  Remarks: No mortality observed at this dose.
  LD50 (Mouse): > 2,000 mg/kg
  Remarks: No mortality observed at this dose.
  LD50 (Dog): > 600 mg/kg
  Symptoms: Vomiting
  Remarks: No mortality observed at this dose.
Acute inhalation toxicity : Remarks: No data available
Acute dermal toxicity: Remarks: No data available

Acute toxicity (other routes of administration):
LD50 (Rat): > 200 mg/kg
   Application Route: Intramuscular
LD50 (Mouse): 500 mg/kg
   Application Route: Intramuscular
LD50 (Rat): 233 mg/kg
   Application Route: Intravenous
LD50 (Mouse): 250 mg/kg
   Application Route: Intravenous

Magnesium stearate:
Acute oral toxicity:
   LD50 (Rat): > 2,000 mg/kg
   Method: OECD Test Guideline 423
   Assessment: The substance or mixture has no acute oral toxicity
   Remarks: Based on data from similar materials

Acute dermal toxicity:
   LD50 (Rabbit): > 2,000 mg/kg
   Remarks: Based on data from similar materials

Skin corrosion/irritation
Not classified based on available information.

Components:

Orbifloxacin:
   Species: Rabbit
   Method: Draize Test
   Result: No skin irritation

Magnesium stearate:
   Species: Rabbit
   Result: No skin irritation
   Remarks: Based on data from similar materials

Serious eye damage/eye irritation
Not classified based on available information.

Components:

Orbifloxacin:
   Species: Rabbit
   Result: Mild eye irritation
   Method: Draize Test

Magnesium stearate:
   Species: Rabbit
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<thead>
<tr>
<th>Version</th>
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<th>SDS Number:</th>
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<th>Date of first issue:</th>
</tr>
</thead>
</table>

### Result
- **No eye irritation**
- **Based on data from similar materials**

### Respiratory or skin sensitisation

### Skin sensitisation
- Not classified based on available information.

### Respiratory sensitisation
- Not classified based on available information.

### Components:

#### Orbifloxacin:
- **Test Type**: Maximisation Test
- **Exposure routes**: Dermal
- **Species**: Guinea pig
- **Result**: Not a skin sensitizer.

#### Magnesium stearate:
- **Test Type**: Maximisation Test
- **Exposure routes**: Skin contact
- **Species**: Guinea pig
- **Method**: OECD Test Guideline 406
- **Result**: negative
- **Remarks**: Based on data from similar materials

### Chronic toxicity

### Germ cell mutagenicity
- Not classified based on available information.

### Components:

#### Orbifloxacin:
- **Genotoxicity in vitro**:
  - **Test Type**: Bacterial reverse mutation assay (AMES)
    - **Result**: equivocal
  - **Test Type**: Mouse Lymphoma
    - **Result**: positive
  - **Test Type**: Chromosomal aberration
    - **Test system**: Human lymphocytes
    - **Result**: positive
- **Genotoxicity in vivo**:
  - **Test Type**: Micronucleus test
    - **Species**: Mouse
    - **Cell type**: Bone marrow
    - **Application Route**: Intraperitoneal injection
    - **Result**: negative
  - **Test Type**: unscheduled DNA synthesis assay
    - **Species**: Rat
    - **Cell type**: Liver cells
Application Route: Oral  
Result: negative

**Germ cell mutagenicity - Assessment**
- Weight of evidence does not support classification as a germ cell mutagen.

**Magnesium stearate:**  
Genotoxicity in vitro  
- Test Type: In vitro mammalian cell gene mutation test  
Result: negative  
Remarks: Based on data from similar materials
- Test Type: Chromosome aberration test in vitro  
Method: OECD Test Guideline 473  
Result: negative  
Remarks: Based on data from similar materials
- Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative  
Remarks: Based on data from similar materials

**Carcinogenicity**  
Not classified based on available information.

**Components:**

**Orbifloxacin:**
- **Species:** Rat  
- **Application Route:** Oral  
- **Exposure time:** 2 Years  
- **NOAEL:** 200 mg/kg body weight  
- **Result:** negative

- **Species:** Mouse  
- **Application Route:** Oral  
- **Exposure time:** 2 Years  
- **NOAEL:** 200 mg/kg body weight  
- **Result:** negative

**Reproductive toxicity**  
Suspected of damaging the unborn child.

**Components:**

**Orbifloxacin:**
- **Effects on fertility**  
  - Test Type: Two-generation reproduction toxicity study  
  - **Species:** Rat  
  - **Application Route:** Oral  
  - **General Toxicity - Parent:** NOAEL: 50 mg/kg body weight  
  - **Early Embryonic Development:** NOAEL: 50 mg/kg body weight  
  - **Result:** No adverse effects

- **Effects on foetal development**  
  - Test Type: Embryo-foetal development  
  - **Species:** Rat
### Reproductive toxicity - Assessment

- **Test Type:** Embryo-foetal development  
  - **Species:** Rabbit  
  - **Application Route:** Oral  
  - **General Toxicity Maternal:** NOAEL: 20 mg/kg body weight  
  - **Embryo-foetal toxicity:** NOAEL: 60 mg/kg body weight  
  - **Result:** No effects on early embryonic development, Embryotoxic effects and adverse effects on the offspring were detected only at high maternally toxic doses, Reduced maternal body weight gain

### Magnesium stearate:

- **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  
  - **Remarks:** Based on data from similar materials

- **Effects on foetal development**
  - **Test Type:** Embryo-foetal development  
  - **Species:** Rat  
  - **Application Route:** Ingestion  
  - **Result:** negative  
  - **Remarks:** Based on data from similar materials

### STOT - single exposure

Not classified based on available information.

### STOT - repeated exposure

Not classified based on available information.

### Repeated dose toxicity

#### Components:

**Orbifloxacin:**
- **Species:** Rat  
- **NOAEL:** 20 mg/kg

---

Application Route: Oral  
Embryo-foetal toxicity: LOAEL: 333 mg/kg body weight  
Result: No teratogenic effects, Embryotoxic effects and adverse effects on the offspring were detected only at high maternally toxic doses

Test Type: Embryo-foetal development  
Species: Rabbit  
Application Route: Oral  
General Toxicity Maternal: NOAEL: 20 mg/kg body weight  
Embryo-foetal toxicity: NOAEL: 60 mg/kg body weight  
Result: No effects on early embryonic development, Embryotoxic effects and adverse effects on the offspring were detected only at high maternally toxic doses, Reduced maternal body weight gain

Test Type: Development  
Species: Dog  
Application Route: Oral  
Developmental Toxicity: LOAEL: 2.5 mg/kg body weight  
Result: Effects on postnatal development, Skeletal malformations
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<table>
<thead>
<tr>
<th>LOAEL</th>
<th>80 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Application Route</strong></td>
<td>Oral</td>
</tr>
<tr>
<td><strong>Exposure time</strong></td>
<td>3 Months</td>
</tr>
<tr>
<td><strong>Target Organs</strong></td>
<td>Testis, Liver, Kidney, spleen</td>
</tr>
</tbody>
</table>

**Species** | Mouse |
| **NOAEL** | 80 mg/kg |
| **LOAEL** | 250 mg/kg |
| **Application Route** | Oral |
| **Exposure time** | 3 Months |

**Species** | Juvenile dog |
| **NOAEL** | 50 mg/kg |
| **LOAEL** | 250 mg/kg |
| **Application Route** | Oral |
| **Exposure time** | 14 Days |
| **Target Organs** | Heart, Bone |
| **Symptoms** | Gastrointestinal disturbance |
| **Remarks** | mortality observed |

**Species** | Juvenile dog |
| **NOAEL** | 2 mg/kg |
| **LOAEL** | 3 mg/kg |
| **Application Route** | Oral |
| **Exposure time** | 90 Days |
| **Target Organs** | Bone |
| **Remarks** | No significant adverse effects were reported |

**Species** | Dog |
| **NOAEL** | 37.5 mg/kg |
| **Application Route** | Oral |
| **Exposure time** | 30 Days |

**Species** | Cat |
| **NOAEL** | 7.5 mg/kg |
| **LOAEL** | 22.5 mg/kg |
| **Application Route** | Oral |
| **Exposure time** | 1 Months |
| **Symptoms** | Gastrointestinal disturbance |

**Magnesium stearate:**

| **Species** | Rat |
| **NOAEL** | > 100 mg/kg |
| **Application Route** | Ingestion |
| **Exposure time** | 90 Days |
| **Remarks** | Based on data from similar materials |

**Aspiration toxicity**

Not classified based on available information.

**Experience with human exposure**

**Components:**

**Orbifloxacin:**
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Section 12: Ecological information

Ecotoxicity

Components:

Magnesium stearate:

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Description</th>
<th>Test substance</th>
<th>Method</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>To fish</td>
<td>LC50 (Leuciscus idus (Golden orfe)): &gt; 100 mg/l</td>
<td>Water Accommodated Fraction</td>
<td>DIN 38412</td>
<td>Based on data from similar materials</td>
</tr>
<tr>
<td></td>
<td>Exposure time: 48 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Method:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remarks:</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To daphnia and other aquatic invertebrates</td>
<td>EL50 (Daphnia magna (Water flea)): &gt; 1 mg/l</td>
<td>Water Accommodated Fraction</td>
<td>Directive 67/548/EEC, Annex V, C.2.</td>
<td>Based on data from similar materials</td>
</tr>
<tr>
<td></td>
<td>Exposure time: 47 h</td>
<td></td>
<td></td>
<td>No toxicity at the limit of solubility</td>
</tr>
<tr>
<td></td>
<td>Test substance:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Method:</td>
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<td>Remarks:</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To algae/aquatic plants</td>
<td>EL50 (Pseudokirchneriella subcapitata (green algae)): &gt; 1 mg/l</td>
<td>Water Accommodated Fraction</td>
<td>OECD Test Guideline 201</td>
<td>Based on data from similar materials</td>
</tr>
<tr>
<td></td>
<td>Exposure time: 72 h</td>
<td></td>
<td></td>
<td>No toxicity at the limit of solubility</td>
</tr>
<tr>
<td></td>
<td>Test substance:</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>Method:</td>
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<td>Remarks:</td>
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</tr>
<tr>
<td>NOELR</td>
<td>Pseudokirchneriella subcapitata (green algae)): &gt; 1 mg/l</td>
<td>Water Accommodated Fraction</td>
<td>OECD Test Guideline 201</td>
<td>Based on data from similar materials</td>
</tr>
<tr>
<td></td>
<td>Exposure time: 72 h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Test substance:</td>
<td></td>
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<td></td>
<td>Method:</td>
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<td>Remarks:</td>
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</tr>
</tbody>
</table>

Toxicity to microorganisms: EC10 (Pseudomonas putida): > 100 mg/l
Exposure time: 16 h
Test substance: Water Accommodated Fraction
Remarks: Based on data from similar materials

Persistence and degradability

Components:

Magnesium stearate:

Biodegradability: Result: Not biodegradable
Remarks: Based on data from similar materials
Bioaccumulative potential

Components:

Magnesium stearate:
Partition coefficient: n-octanol/water
: log Pow: > 4

Mobility in soil
No data available

Other adverse effects
No data available

Section 13: Disposal considerations

Disposal methods
Waste from residues : Dispose of in accordance with local regulations.
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

International Regulations

UNRTDG
Not regulated as a dangerous good

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

National Regulations

NZS 5433
Not regulated as a dangerous good

Section 15: Regulatory information

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

HSNO Approval Number
HSR100759 Veterinary Medicines Non dispersive Open System Application Group Standard 2017

HSW Controls
Certified handler certificate not required.
Tracking hazardous substance not required.
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Refer to the Health and Safety at Work (Hazardous Substances) Regulations 2017, for further information.

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

- **AICS**: not determined
- **DSL**: not determined
- **IECSC**: not determined

**Section 16: Other information**

**Further information**

Date format: dd.mm.yyyy

**Full text of other abbreviations**

- **ACGIH**: USA, ACGIH Threshold Limit Values (TLV)
- **NZ OEL**: New Zealand. Workplace Exposure Standards for Atmospheric Contaminants

**ACGIH / TWA**: 8-hour, time-weighted average

**NZ OEL / WES-TWA**: Workplace Exposure Standard - Time Weighted average

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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; ERG - Emergency Response Guide; 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 Standardisation; 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; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic Substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Trans-
portation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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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