

**Ivermectin Formulation**

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 03.02.2025  |
| 11.0    | 14.04.2025     | 6097526-00017 | Date of first issue: 30.06.2020 |

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**Section 1: Identification**

Product name : Ivermectin Formulation

**Manufacturer or supplier's details**

Company : MSD

Address : 33 Whakatiki Street - Private Bag 908  
Upper Hutt - New Zealand

Telephone : 0800 800 543

Emergency telephone number : 0800 764 766 (0800 POISON) 0800 243 622 (0800 CHEMCALL)

E-mail address : EHSDATASTEWARD@msd.com

**Recommended use of the chemical and restrictions on use**

Recommended use : Veterinary product

Restrictions on use : Not applicable

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**Section 2: Hazard identification****GHS Classification**

Specific target organ toxicity - single exposure (Oral) : Category 2 (Central nervous system)

Specific target organ toxicity - repeated exposure (Oral) : Category 2 (Central nervous system)

Hazardous to the aquatic environment - acute hazard : Category 1

Hazardous to the aquatic environment - chronic hazard : Category 1

**GHS label elements**

Hazard pictograms :



Signal word : Warning

Hazard statements : H371 May cause damage to organs (Central nervous system) if swallowed.  
H373 May cause damage to organs (Central nervous system)

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through prolonged or repeated exposure if swallowed.  
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements :

**Prevention:**

P260 Do not breathe mist or vapours.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P273 Avoid release to the environment.

**Response:**

P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor.  
P391 Collect spillage.

**Storage:**

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards which do not result in classification**

None known.

**Section 3: Composition/information on ingredients**

Substance / Mixture : Mixture

**Components**

| Chemical name              | CAS-No.    | Concentration (% w/w) |
|----------------------------|------------|-----------------------|
| Ivermectin                 | 70288-86-7 | $\geq 1$ -< 2.5       |
| 2,6-Di-tert-butyl-p-cresol | 128-37-0   | $\geq 0.25$ -< 1      |

**Section 4: First-aid measures**

|                         |   |
|-------------------------|---|
| General advice          | : In the case of accident or if you feel unwell, seek medical advice immediately.<br>When symptoms persist or in all cases of doubt seek medical advice.  |
| If inhaled              | : If inhaled, remove to fresh air.<br>Get medical attention if symptoms occur.  |
| In case of skin contact | : Wash with water and soap as a precaution.<br>Get medical attention if symptoms occur.   |
| In case of eye contact  | : Flush eyes with water as a precaution.<br>Get medical attention if irritation develops and persists.  |
| If swallowed            | : If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel.<br>Get medical attention.<br>Rinse mouth thoroughly with water.<br>Never give anything by mouth to an unconscious person. |
| Most important symptoms | : May cause damage to organs if swallowed.  |

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and effects, both acute and delayed  
Protection of first-aiders : May cause damage to organs through prolonged or repeated exposure if swallowed.  
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 (CO<sub>2</sub>)  
Dry chemical

Unsuitable extinguishing media : None known.

Specific hazards during fire-fighting : Exposure to combustion products may be a hazard to health.

Hazardous combustion products : Carbon 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.

Hazchem Code : 3Z

**Section 6: Accidental release measures**

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

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.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material.  
For large spills, provide dyking or other appropriate contain-

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ment 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.

### Section 7: Handling and storage

- |                             |   |  |
|-----------------------------|---|--|
| 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.<br>Do not swallow.<br>Avoid contact with eyes.<br>Avoid prolonged or repeated contact with skin.<br>Wash skin thoroughly after handling.<br>Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment<br>Do not eat, drink or smoke when using this product.<br>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.<br>When using do not eat, drink or smoke.<br>Wash contaminated clothing before re-use.<br>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.<br>Store locked up.<br>Store in accordance with the particular national regulations.   |
| Materials to avoid          | : | Do not store with the following product types:<br>Strong oxidizing agents  |

### Section 8: Exposure controls/personal protection

#### Components with workplace control parameters

| Components | CAS-No.    | Value type<br>(Form of exposure) | Control parameters / Permissible concentration | Basis    |
|------------|------------|----------------------------------|--|----------|
| Ivermectin | 70288-86-7 | TWA                              | 30 µg/m3 (OEB 3)                               | Internal |

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|                            |          |                                      |                            |          |
|----------------------------|----------|--------------------------------------|----------------------------|----------|
|                            |          | Further information: Skin            |                            |          |
|                            |          | Wipe limit                           | 300 µg/100 cm <sup>2</sup> | Internal |
| 2,6-Di-tert-butyl-p-cresol | 128-37-0 | WES-TWA                              | 10 mg/m <sup>3</sup>       | NZ OEL   |
|                            |          | Further information: Skin sensitiser |                            |          |
|                            |          | TWA (Inhalable fraction and vapor)   | 2 mg/m <sup>3</sup>        | ACGIH    |

**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.  
Containment technologies suitable for controlling compounds are required to control at source and to prevent migration of the compound to uncontrolled areas (e.g., open-face containment devices).  
Minimize open handling.

**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

**Remarks** : Consider double gloving.

**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 faceshield 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.  
Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces.  
Use appropriate degowning techniques to remove potentially contaminated clothing.

**Section 9: Physical and chemical properties**

**Appearance** : oily

**Colour** : light yellow

**Odour** : characteristic

**Odour Threshold** : No data available

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|  |   |  |
|--|---|--|
| pH   | : | No data available  |
| Melting point/freezing point                     | : | No data available  |
| Initial boiling point and boiling range          | : | 167.5 °C   |
| Flash point                                      | : | 219.2 °C   |
| Evaporation rate                                 | : | 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  |
| Vapour pressure                                  | : | No data available  |
| Relative vapour density                          | : | No data available  |
| Relative density                                 | : | 0.88 - 0.92  |
| Density  | : | No data available  |
| Solubility(ies)<br>Water solubility              | : | practically insoluble                                    |
| Partition coefficient: n-octanol/water           | : | Not applicable   |
| Auto-ignition temperature                        | : | No data available  |
| Decomposition temperature                        | : | No data available  |
| Viscosity<br>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 characteristics<br>Particle size        | : | Not applicable   |

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**Section 10: Stability and reactivity**

|                                    |   |  |
|------------------------------------|---|--|
| Reactivity                         | : | Not classified as a reactivity hazard.         |
| Chemical stability                 | : | Stable under normal conditions.                |
| Possibility of hazardous reactions | : | Can react with strong oxidizing agents.        |
| Conditions to avoid                | : | None known.                                    |
| Incompatible materials             | : | Oxidizing agents                               |
| Hazardous decomposition products   | : | No hazardous decomposition products are known. |

**Section 11: Toxicological information**

|                 |   |  |
|-----------------|---|--|
| Exposure routes | : | Inhalation<br>Skin contact<br>Ingestion<br>Eye contact |
|-----------------|---|--|

**Acute toxicity**

Not classified based on available information.

**Product:**

|                     |   |  |
|---------------------|---|--|
| Acute oral toxicity | : | Acute toxicity estimate: > 2,000 mg/kg<br>Method: Calculation method |
|---------------------|---|--|

|                       |   |  |
|-----------------------|---|--|
| Acute dermal toxicity | : | Acute toxicity estimate: > 2,000 mg/kg<br>Method: Calculation method |
|-----------------------|---|--|

**Components:****Ivermectin:**

|                           |   |   |
|---------------------------|---|---|
| Acute oral toxicity       | : | LD50 (Rat): 50 mg/kg<br><br>LD50 (Mouse): 25 mg/kg<br><br>LD50 (Monkey): > 24 mg/kg<br>Target Organs: Central nervous system<br>Symptoms: Vomiting, Dilatation of the pupil<br>Remarks: No mortality observed at this dose. |
| Acute inhalation toxicity | : | LC50 (Rat): 5.11 mg/l<br>Exposure time: 1 h<br>Test atmosphere: dust/mist   |
| Acute dermal toxicity     | : | LD50 (Rabbit): 406 mg/kg<br><br>LD50 (Rat): > 660 mg/kg   |

**2,6-Di-tert-butyl-p-cresol:**

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|                       |   |
|-----------------------|---|
| Acute oral toxicity   | : LD50 (Rat): > 6,000 mg/kg<br>Method: OECD Test Guideline 401  |
| Acute dermal toxicity | : LD50 (Rat): > 2,000 mg/kg<br>Method: OECD Test Guideline 402<br>Assessment: The substance or mixture has no acute dermal toxicity |

**Skin corrosion/irritation**

Not classified based on available information.

**Components:****Ivermectin:**

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

**2,6-Di-tert-butyl-p-cresol:**

|         |  |
|---------|--|
| Species | : Rabbit                               |
| Method  | : OECD Test Guideline 404              |
| Result  | : No skin irritation                   |
| Remarks | : Based on data from similar materials |

**Serious eye damage/eye irritation**

Not classified based on available information.

**Components:****Ivermectin:**

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

**2,6-Di-tert-butyl-p-cresol:**

|         |  |
|---------|--|
| Species | : Rabbit                               |
| Result  | : No eye irritation                    |
| Method  | : OECD Test Guideline 405              |
| Remarks | : 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:****Ivermectin:**

|                 |          |
|-----------------|----------|
| Exposure routes | : Dermal |
|-----------------|----------|



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|         |                                      |
|---------|--------------------------------------|
| Species | : Humans                             |
| Result  | : Does not cause skin sensitisation. |

**2,6-Di-tert-butyl-p-cresol:**

|                 |  |
|-----------------|--|
| Test Type       | : Human repeat insult patch test (HRIPT) |
| Exposure routes | : Skin contact                           |
| Species         | : Humans                                 |
| Result          | : negative                               |

**Chronic toxicity****Germ cell mutagenicity**

Not classified based on available information.

**Components:****Ivermectin:**

|                       |  |
|-----------------------|--|
| Genotoxicity in vitro | : Test Type: Bacterial reverse mutation assay (AMES)<br>Result: negative<br><br>Test Type: DNA damage and repair, unscheduled DNA synthesis in mammalian cells (in vitro)<br>Test system: human diploid fibroblasts<br>Result: negative<br><br>Test Type: Mouse Lymphoma<br>Result: negative |
|-----------------------|--|

**2,6-Di-tert-butyl-p-cresol:**

|                       |   |
|-----------------------|---|
| Genotoxicity in vitro | : Test Type: Bacterial reverse mutation assay (AMES)<br>Result: negative<br><br>Test Type: In vitro mammalian cell gene mutation test<br>Result: negative<br><br>Test Type: Chromosome aberration test in vitro<br>Result: negative |
| Genotoxicity in vivo  | : Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)<br>Species: Rat<br>Application Route: Ingestion<br>Result: negative  |

**Carcinogenicity**

Not classified based on available information.

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**Components:****Ivermectin:**

|                   |  |
|-------------------|--|
| Species           | : Rat                                  |
| Application Route | : Oral                                 |
| NOAEL             | : 1.5 mg/kg body weight                |
| Result            | : negative                             |
| Remarks           | : Based on data from similar materials |

|                   |  |
|-------------------|--|
| Species           | : Mouse                                |
| Application Route | : Oral                                 |
| NOAEL             | : 2.0 mg/kg body weight                |
| Result            | : negative                             |
| Remarks           | : Based on data from similar materials |

**2,6-Di-tert-butyl-p-cresol:**

|                   |             |
|-------------------|-------------|
| Species           | : Rat       |
| Application Route | : Ingestion |
| Exposure time     | : 22 Months |
| Result            | : negative  |

**Reproductive toxicity**

Not classified based on available information.

**Components:****Ivermectin:**

|                               |   |
|-------------------------------|---|
| Effects on fertility          | : Test Type: Fertility<br>Species: Rat<br>Application Route: Oral<br>Fertility: NOAEL: 0.6 mg/kg body weight<br>Result: Animal testing did not show any effects on fertility.   |
| Effects on foetal development | : Test Type: Development<br>Species: Mouse<br>Application Route: Oral<br>Developmental Toxicity: NOAEL: 0.2 mg/kg body weight<br>Result: Teratogenic effects, Embryotoxic effects and adverse effects on the offspring were detected only at high maternally toxic doses<br><br>Test Type: Development<br>Species: Rat<br>Application Route: Oral<br>Developmental Toxicity: LOAEL: 0.4 mg/kg body weight<br>Result: Embryotoxic effects and adverse effects on the offspring were detected.<br>Remarks: The mechanism or mode of action may not be relevant in humans.<br><br>Test Type: Development |

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Species: Rabbit  
Application Route: Oral  
Result: Teratogenic effects, Embryotoxic effects and adverse effects on the offspring were detected only at high maternally toxic doses

**2,6-Di-tert-butyl-p-cresol:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study  
Species: Rat  
Application Route: Ingestion  
Result: negative

Effects on foetal development : Test Type: Embryo-foetal development  
Species: Rat  
Application Route: Ingestion  
Result: negative

**STOT - single exposure**

May cause damage to organs (Central nervous system) if swallowed.

**Components:****Ivermectin:**

Target Organs : Central nervous system  
Assessment : Causes damage to organs.

**STOT - repeated exposure**

May cause damage to organs (Central nervous system) through prolonged or repeated exposure if swallowed.

**Components:****Ivermectin:**

Target Organs : Central nervous system  
Assessment : Causes damage to organs through prolonged or repeated exposure.

**2,6-Di-tert-butyl-p-cresol:**

Assessment : No significant health effects observed in animals at concentrations of 100 mg/kg bw or less.

**Repeated dose toxicity****Components:****Ivermectin:**

Species : Dog  
NOAEL : 0.5 mg/kg  
LOAEL : 1 mg/kg  
Application Route : Oral

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|               |  |
|---------------|--|
| Exposure time | : 14 Weeks   |
| Target Organs | : Central nervous system   |
| Symptoms      | : Dilatation of the pupil, Tremors, Lack of coordination, anorexia |

|                   |  |
|-------------------|--|
| Species           | : Monkey                                       |
| NOAEL             | : 1.2 mg/kg                                    |
| Application Route | : Oral   |
| Exposure time     | : 2 Weeks                                      |
| Remarks           | : No significant adverse effects were reported |

|                   |                               |
|-------------------|-------------------------------|
| Species           | : Rat                         |
| NOAEL             | : 0.4 mg/kg                   |
| LOAEL             | : 0.8 mg/kg                   |
| Application Route | : Oral                        |
| Exposure time     | : 3 Months                    |
| Target Organs     | : spleen, Bone marrow, Kidney |

**2,6-Di-tert-butyl-p-cresol:**

|                   |             |
|-------------------|-------------|
| Species           | : Rat       |
| NOAEL             | : 25 mg/kg  |
| Application Route | : Ingestion |
| Exposure time     | : 22 Months |

**Aspiration toxicity**

Not classified based on available information.

**Experience with human exposure****Components:****Ivermectin:**

|              |  |
|--------------|--|
| Skin contact | : Remarks: Can be absorbed through skin.   |
| Eye contact  | : Remarks: May irritate eyes.  |
| Ingestion    | : Symptoms: Drowsiness, Dilatation of the pupil, Tremors, Vomiting, anorexia, Lack of coordination |

**Section 12: Ecological information****Ecotoxicity****Components:****Ivermectin:**

|   |   |
|---|---|
| Toxicity to fish                                    | : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.003 mg/l<br>Exposure time: 96 h     |
|   | : LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.0048 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : EC50 (Daphnia magna (Water flea)): 0.000025 mg/l<br>Exposure time: 48 h           |

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Toxicity to algae/aquatic plants : EC50 (*Pseudokirchneriella subcapitata* (green algae)): > 9.1 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

NOEC (*Pseudokirchneriella subcapitata* (green algae)): 9.1 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 10,000

M-Factor (Chronic aquatic toxicity) : 10,000

**2,6-Di-tert-butyl-p-cresol:**

Toxicity to fish : LC50 (*Danio rerio* (zebra fish)): > 0.57 mg/l  
Exposure time: 96 h  
Method: Directive 67/548/EEC, Annex V, C.1.

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): 0.48 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : ErC50 (*Pseudokirchneriella subcapitata* (green algae)): > 0.24 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

NOEC (*Pseudokirchneriella subcapitata* (green algae)): 0.24 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : NOEC (*Oryzias latipes* (Japanese medaka)): 0.053 mg/l  
Exposure time: 30 d  
Method: OECD Test Guideline 210

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (*Daphnia magna* (Water flea)): 0.316 mg/l  
Exposure time: 21 d

M-Factor (Chronic aquatic toxicity) : 1

Toxicity to microorganisms : EC50: > 10,000 mg/l  
Exposure time: 3 h  
Method: OECD Test Guideline 209

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**Persistence and degradability****Components:****Ivermectin:**

|                  |   |  |
|------------------|---|--|
| Biodegradability | : | Result: Not readily biodegradable.<br>Biodegradation: 50 %<br>Exposure time: 240 d |
|------------------|---|--|

**2,6-Di-tert-butyl-p-cresol:**

|                  |   |  |
|------------------|---|--|
| Biodegradability | : | Result: Not readily biodegradable.<br>Biodegradation: 4.5 %<br>Exposure time: 28 d<br>Method: OECD Test Guideline 301C |
|------------------|---|--|

**Bioaccumulative potential****Components:****Ivermectin:**

|  |   |                                   |
|--|---|-----------------------------------|
| Bioaccumulation                        | : | Bioconcentration factor (BCF): 74 |
| Partition coefficient: n-octanol/water | : | log Pow: 3.22                     |

**2,6-Di-tert-butyl-p-cresol:**

|  |   |   |
|--|---|---|
| Bioaccumulation                        | : | Species: Cyprinus carpio (Carp)<br>Bioconcentration factor (BCF): 330 - 1,800 |
| Partition coefficient: n-octanol/water | : | log Pow: 5.1  |

**Mobility in soil**

No data available

**Other adverse effects**

No data available

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**Section 13: Disposal considerations****Disposal methods**

|                        |   |   |
|------------------------|---|---|
| Waste from residues    | : | Do not dispose of waste into sewer.<br>Dispose of in accordance with local regulations.   |
| Contaminated packaging | : | Empty containers should be taken to an approved waste handling site for recycling or disposal.<br>If not otherwise specified: Dispose of as unused product. |

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**Section 14: Transport information****International Regulations**

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| 11.0    | 14.04.2025     | 6097526-00017 | Date of first issue: 30.06.2020 |

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**UNRTDG**

|                           |   |
|---------------------------|---|
| UN number                 | : UN 3082   |
| Proper shipping name      | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(Ivermectin, 2,6-Di-tert-butyl-p-cresol) |
| Class                     | : 9   |
| Packing group             | : III   |
| Labels                    | : 9   |
| Environmentally hazardous | : yes   |

**IATA-DGR**

|  |   |
|--|---|
| UN/ID No.                                | : UN 3082   |
| Proper shipping name                     | : Environmentally hazardous substance, liquid, n.o.s.<br>(Ivermectin, 2,6-Di-tert-butyl-p-cresol) |
| Class                                    | : 9   |
| Packing group                            | : III   |
| Labels                                   | : Miscellaneous   |
| Packing instruction (cargo aircraft)     | : 964   |
| Packing instruction (passenger aircraft) | : 964   |
| Environmentally hazardous                | : yes   |

**IMDG-Code**

|                      |   |
|----------------------|---|
| UN number            | : UN 3082   |
| Proper shipping name | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(Ivermectin, 2,6-Di-tert-butyl-p-cresol) |
| Class                | : 9   |
| Packing group        | : III   |
| Labels               | : 9   |
| EmS Code             | : F-A, S-F  |
| Marine pollutant     | : yes   |

**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**

|                      |   |
|----------------------|---|
| UN number            | : UN 3082   |
| Proper shipping name | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(Ivermectin, 2,6-Di-tert-butyl-p-cresol) |
| Class                | : 9   |
| Packing group        | : III   |
| Labels               | : 9   |
| Hazchem Code         | : 3Z  |
| Marine pollutant     | : no  |

**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

**Ivermectin Formulation**

|         |                |               |                                 |
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Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

**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

Tolerable Exposure Limits (TEL)

Not applicable

Environmental Exposure Limits (EEL)

| Chemical name | Environmental compartment | Reference concentration |
|---------------|---------------------------|-------------------------|
| ivermectin    | Fresh water               | 0.0000001 mg/l          |
| ivermectin    | Marine water              | 0.000001 mg/l           |

**HSW Controls**

Certified handler certificate not required.

Tracking hazardous substance not required.

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**

Revision Date : 14.04.2025

**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/>

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

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



**Ivermectin Formulation**

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

AIIC - Australian Inventory of Industrial Chemicals; 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 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; 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 - Transportation of Dangerous Goods; TECL - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; 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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