| Abamectin, Closantel Water Based Formulation | | | | |
|--|-----------------------------|-----------------------------------|----------------------------------|--|
| Version 1.0 | Revision Date 18-03-2025 | Date of First Issue 18-03-2025 | Date of Last Issue 18-03-2025 | |
| Section 1: Identificati | on | | | |
| Product name: | farma De | fend Mineralised Oral Di | rench for Sheep | |
| Manufacturer Details | | | | |
| Company: | Nexan Co | rporation Limited | | |
| Address: | 16A Ormi | ston Road, East Tamaki, | Auckland, New Zealand. | |
| Telephone: | 09 274 88 | 48 | | |
| Emergency telephone nu | mber: 0800 764 | 766 (0800 POISON) | | |
| Recommended use of the | e Product | | | |
| Recommended use: | Veterinar | y Medicine | | |

Section 2: Hazard Identification

GHS Classification

Skin sensitisation: Category 1 Carcinogenicity: Category 2 Reproductive toxicity: Category 2 Reproductive toxicity: Effects on or via lactation Specific target organ toxicity repeated exposure: Category 2 Hazardous to the aquatic environment acute: Category 1 Hazardous to the aquatic environment chronic: Category 1 Hazardous to soil organisms Hazardous to terrestrial vertebrates Hazardous to terrestrial invertebrates

GHS label elements

Hazard pictograms:

Signal Word:

Warning

Hazard statements:
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer
H361 Suspected of damaging fertility or the unborn child.
H362 May cause harm to breast-fed children
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H423 Harmful to the soil environment.
H433 Harmful to terrestrial vertebrates.

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| | | H443 Harmful to terrestrial invertebra | ates. |
| Precautionary statements: | | Prevention: P103 Read label before use. P201 Obtain special instructions befo P202 Do not handle until all safety pre understood. P260 Do not breathe dust/fumes/gas, P261 Avoid breathing dust/fume/gas, P263 Avoid contact during pregnancy P264 Wash hands thoroughly after have P270 Do not eat, drink or smoke whe P272 Contaminated work clothing sho workplace. P273 Avoid release to the environment P280 Wear protective gloves/protect protection. P281 Use personal protective equipment | ecautions have been read and /mist/vapours/spray. /mist/vapours/spray. /while nursing. andling. n using this product. ould not be allowed out of the nt. ive clothing/eye protection/face |
| | | Response: P101 If medical advice is needed, hav P302 IF ON SKIN: P352 Wash with ple P308 IF exposed or concerned: P313 (P312 Call a POISON CENTER or doctor P314 Get medical advice/attention if P321 Specific measures in section 4. P322 Specific measures in section 4. P333 f skin irritation or rash occurs: P P363 Wash contaminated clothing be P391 Collect spillage. | nty of soap and water. Get medical advice/attention. r/physician if you feel unwell. you feel unwell. 313 Get medical advice/attention. |
| | | Storage: P405 Store locked up. | |
| Other bezorde which de r | | Disposal: P501 Dispose of contents/ container | to an approved waste disposal plant. |

Other hazards which do not result in classification

None known.

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Section 3: Compositon/information on ingredients

Substance / Mixture:

Mixture

Components

| Chemical name | CAS number | Concentration (% w/v) |
|----------------------------|------------|-----------------------|
| Abamectin | 71751-41-2 | 0.1 |
| Closantel (as Sodium salt) | 61438-64-0 | 5.0 |
| Cobalt EDTA | 15137-09-4 | <10 |
| Sodium selenate | 13410-01-0 | <1 |

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 if symptoms occur. |
| In case of skin contact: | In case of contact, immediately flush skin with soap and plenty of water. Get medical attention if symptoms occur. |
| In case of eye contact: | Flush eyes with water as a precaution. Get medical attention if irritation develops and persists. |
| If swallowed: | If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water. |
| Most important symptoms and effects, both acute and delayed: | Causes damage to organs through prolonged or repeated exposure. |
| 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 (CO ₂) Dry chemical |
|--|---|
| Unsuitable extinguishing media: Specific hazards during firefighting: Hazardous combustion products: | None known. |
| Specific extinguishing methods: | Carbon oxides Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. |

SAFETY DATA SHEET – farma Defend Mineralised Oral Drench for Sheep Abamectin, Closantel Water Based Formulation

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| Special protective equipn for firefighters | nent: In the event | 0 | om fire area if it is safe to do so. ained breathing apparatus. t. |

Section 6: Accidental release measures

| Personal precautions, protective equipment and emergency procedures: Environmental precautions: | Use personal protective equipment. Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8). Avoid release to the environment. 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: | 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. |

Section 7: Handling and storage

| Technical measures: Local/Total ventilation: Advice on safe handling: | See Engineering measures under section 8. Use only with adequate ventilation. Do not breathe dust, fume, gas, mist, vapours or spray. Do not swallow. Avoid contact with 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: Conditions for safe storage: | 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. Keep in properly labelled containers. |
| conditions for sale storage. | |

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| Materials to avoid: | | dance with the particular with the following product ng agents | - |

Section 8: Exposure controls/personal protection

Components with workplace control parameters

No WES is set for this substance at this time.

| 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: | Organic vapour 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. |
| Skin and body protection: | Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols. Work uniform or laboratory coat. |

Section 9: Physical and chemical properties

| Appearance: | Aqueous Liquid |
|---------------------|--------------------|
| Colour: | Pale purple liquid |
| Specific gravity: | 1.05 – 1.07 |
| Behaviour in water: | Miscible in water |

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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

Inhalation: Cobalt EDTA: Respiratory effects seen at 2.4mg/m³ in female Guinea-pigs Ingestion: Harmful if swallowed Abamectin: LD50 8.7 – 12.8 mg/kg Closantel sodium: LD50 262mg/kg Sodium selenate: LD50 25mg/kg/bw

Chronic Effects

Abamectin: No evidence of mutagenic or carcinogenic effects. Cobalt: Causes respiratory tract irritation, may cause asthma and shortness of breath. Sodium selenate: NOAEL 0.37mg/kg/bw/day for Hepatotoxicity/Alimentary system effects.

Section 12: Ecological information

| Aquatic: | Abamectin: 96hr LC50 0.0036mg/L (Rainbow trout) Closantel sodium: 24hr LC50 2.5mg/L (Common eel) Sodium selenate: 96hr LC50 0.69mg/L (Fathead minnow) |
|----------------------------|---|
| Soil: | Abamectin photodegrades rapidly in the environment and is metabolized in the soil. |
| Terrestrial Vertebrates: | Abamectin: 8.7–12.8mg/kg |
| Terrestrial Invertebrates: | Abamectin: 8.7–12.8mg/kg |

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

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| Dangerous Goods for trai | nsport. ENVIRONMENTALI | LY HAZARDOUS SUBSTAN | CE, LIQUID, N.O.S. (Abamectin) |
| DG Class: | 9 | | |

Section 15: Regulatory information

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

HSNO Approval Number

HSR100758 Veterinary Medicines Non dispersive Closed System Application Group Standard 2020

HSW Controls

UN Number:

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.

Section 16: Other information

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.