



SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND SUPPLIER

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| Product name: | Turbo® Injection |
| Recommended use: | For the treatment and control of internal parasites in cattle. |
| Company name: | Alleva Animal Health Limited |
| Address: | 1/ 1/116a Harris Road, East Tamaki 2013, Auckland, New Zealand |
| Telephone: | 0064-9-4181405 |
| Emergency telephone number: | National Poisons Centre: 0800 764 766 (0800 POISON) Fire Service, Ambulance: Dial 111 |
| Date of Preparation | 20 July 2020 |
| Restrictions of Use | Refer to Section 15 |

SECTION 2: HAZARDS IDENTIFICATION

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval No: HSR100758

Pictograms



Toxic



Chronic



Ecotoxic

Signal Word: **Warning**

| HSNO Classification | Hazard Code | Hazard Statement | GHS Category |
|---------------------|-------------|--|--------------|
| 6.1D (oral) | H302 | Harmful if swallowed. | Acute Tox. 4 |
| 6.5B | H317 | May cause an allergic skin reaction. | Skin Sens. 1 |
| 6.6B | H341 | Suspected of causing genetic defects | Muta. 2 |
| 6.8B | H361 | Suspected of damaging fertility or the unborn child. | Repr. 2 |
| 6.8C | H362 | May cause harm to breast-fed children. | Lact. |



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|------|------|--|-----------------|
| 6.9B | H373 | May cause damage to organs (oral) through repeated or prolonged exposure | STOT RE 2 |
| 9.1A | H400 | Very toxic to aquatic life. | Aquatic Acute 1 |
| 9.2C | H423 | Harmful to the soil environment. | - |
| 9.3B | H432 | Toxic to terrestrial vertebrates. | - |
| 9.4A | H441 | Very toxic to terrestrial invertebrates. | - |

| Prevention Code | Prevention Statement |
|-----------------|---|
| P102 | Keep out of reach of children. |
| P103 | Read label before use. |
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260 | Do not breathe fumes, vapours and spray. |
| P263 | Avoid contact during pregnancy/while nursing. |
| P264 | Wash hands thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective clothing as detailed in Section 8. |
| P281 | Use personal protective equipment as required. |

| Response Code | Response Statement |
|---------------|--|
| P101 | If medical advice is needed, have product container or label at hand. |
| P314 | Get medical advice/attention if you feel unwell. |
| P330 | Rinse mouth. |
| P363 | Wash contaminated clothing before reuse. |
| P391 | Collect spillage. |
| P301 + P312 | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |

| Storage Code | Storage Statement |
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| P405 | Store locked up. |

| Disposal Code | Disposal Statement |
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| P501 | Dispose of according to Local Regulations or Authorities |

SECTION 3: COMPOSITION

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| Product Components: | | |
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| Name | CAS # | Concentration |
|----------------------|-------------|---------------|
| Levamisole Phosphate | 14769-73-4 | 318g/l |
| Eprinomectin | 123997-26-2 | 10g/l |
| Ivermectin | 70288-86-7 | 10g/l |
| Non hazardous | | To bal |

SECTION 4: FIRST AID MEASURES

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| First Aid | <p>Skin Contact: Wash with plenty of soap and water. Take off contaminated clothing and wash before re-use. If skin irritation or rash occurs: get medical advice/attention.</p> <p>Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.</p> <p>Ingestion: If swallowed, immediately flush mouth with water. Never give anything to the mouth of an unconscious person. Call a POISON CENTER or doctor/physician if you feel unwell.</p> <p>Inhaled: Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult or if you feel unwell.</p> |
| Most important symptoms and effects, both acute and delayed | <p>Ingestion: Harmful if swallowed.</p> <p>Inhalation: Not applicable.</p> <p>Skin: May cause an allergic skin reaction.</p> <p>Eye: Not applicable.</p> <p>Chronic: Suspected of damaging fertility or the unborn child. May cause harm to breast-fed children. Suspected of causing genetic defects. Causes damage to organs (oral) through prolonged or repeated exposure.</p> |

SECTION 5: FIRE FIGHTING MEASURES

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| Type of hazard: | This material is non-flammable or combustible. |
| Fire hazard properties: | None known. |
| Extinguishing media and methods: | Use water spray or regular foam. |



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| Hazchem code: | 3Z |
| Recommended protective clothing for firefighters: | When fighting a major fire wear full protective clothing including breathing apparatus. |

SECTION 6: ACCIDENTAL RELEASE MEASURES

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| Personal Precautions: | Personnel involved in clean-up should wear appropriate personal protective equipment as detailed in Section 8 to minimise exposure. Restrict access to contaminated area. |
| Environmental Precautions: | Prevent material from entering surface water drains or waterways. |
| Procedure for Spills: | Contain the spill and prevent further dispersion. Retrieve intact containers from site. Place damaged containers into containment devices. Absorb spills with inert material and place in waste containers. Wash the area with water and absorb with further inert material. Collect spilled material and place in sealable containers for subsequent disposal. |
| Procedure for Disposal: | Dispose of according to Local Regulations detailed in Section 13. |

SECTION 7: HANDLING AND STORAGE

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| Precautions for safe handling: | <ul style="list-style-type: none"> • Read label before use. • Obtain special instructions before use. • Do not handle until all safety precautions have been read and understood. • Do not breathe fumes, vapours and spray. • Avoid contact during pregnancy/while nursing. • Wash hands thoroughly after handling. • Do not eat, drink or smoke when using this product. |
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| | <ul style="list-style-type: none"> Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective clothing as detailed in Section 8. Use personal protective equipment as required. |
| Certified handlers: | <ul style="list-style-type: none"> Not Required |
| Conditions for safe storage: | <ul style="list-style-type: none"> Store away from incompatible materials listed in Section 10. Keep out of reach of children. Store locked up. Store in cool and dry place and keep away from strong light and heat. |

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

| Substance | TWA | | STEL | |
|-----------|-----|-------------------|------|-------------------|
| | ppm | mg/m ³ | ppm | mg/m ³ |

No substance has exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2019 11TH EDITION.

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| Engineering controls: | None needed. |
| Personal protection: | Respiratory protection: Not required. Hand protection: Wear protective gloves. Eye protection: Not required. |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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| Appearance | Clear colourless to pale yellow solution |
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| Odour | Mild Odour |
| Odour Threshold | Not applicable |
| pH | Between 3.5 – 4.5 |
| Boiling Point | Not available |
| Melting Point | Not applicable |
| Freezing Point | Not applicable |
| Flash Point | Not applicable |
| Flammability | Non flammable |
| Upper and Lower Explosive Limits | Not applicable |
| Vapour Pressure | Not applicable |
| Vapour Density | Not applicable |
| Specific Gravity | 1.15 |
| Water Solubility | Not available |
| Partition Coefficient: | Not applicable |
| Auto-ignition Temperature | Not applicable |
| Decomposition Temperature | Not applicable |
| Kinematic Viscosity | Between 15 – 35 mPa.s |

SECTION 10: STABILITY AND REACTIVITY

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| Stability of the substance: | This product is stable under normal conditions. |
| Conditions to avoid: | High temperatures and strong light. |
| Material to avoid: | None known. |
| Hazardous decomposition products: | None known. |

SECTION 11: TOXICOLOGICAL INFORMATION

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| Acute effects: | |
| Swallowed | Harmful if swallowed. |
| Dermal | Not applicable. |
| Inhalation | Not applicable. |
| Skin | May cause an allergic skin reaction. |
| Eye | Not applicable. |
| Chronic and long-term effects: | |
| Reproductive Systemic | Suspected of damaging fertility or the unborn child. May cause harm to breast-fed children. |
| Carcinogenicity | Not applicable. |
| Aspiration | Not applicable. |



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| Germ Cell Mutagenicity | Suspected of causing genetic defects |
| STOT/RE | May cause damage to organs (oral) through prolonged or repeated exposure. |

Eprinomectin: As all macrocyclic lactones, eprinomectin acts as agonist of the GABA (gamma-aminobutyric acid) neurotransmitter in nerve cells and also binds to glutamate-gated chloride channels in nerve and muscle cells of invertebrates. In both cases it blocks the transmission of neuronal signals of the parasites, which are paralyzed and expelled out of the body, or they starve. It also affects the reproduction of some parasites by diminishing oviposition or inducing an abnormal oogenesis. The literature shows the acute toxicity of Eprinomectin was determined in mice & rats. In female mice the oral & intraperitoneal DL50 values were 70 & 35 mg/kg body weight whereas in female rats the DL50 values were 55 & 35 mg/kg body weight after oral & intraperitoneal administration respectively. High doses produced respiratory failure and deaths. The critical adverse effects in multigenerational reproductive studies were mortality and reduced weight gain of pups in early lactation. Suspected of damaging fertility or the unborn child.

SECTION 12: ENVIRONMENTAL INFORMATION

HSNO Classes: 9.1A = Very toxic to aquatic life.
 9.2C = Harmful to the soil environment.
 9.3B = Toxic to terrestrial vertebrates.
 9.4A = Very toxic to terrestrial invertebrates.

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|--------------------------------------|---------------------------------|
| Persistence and degradability | No data available |
| Bioaccumulation | No data available |
| Mobility in Soil | No data available |
| Other adverse effects | No data available |
| Precautions | Do not allow to enter waterways |

SECTION 13: DISPOSAL CONSIDERATIONS

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| Product disposal: | Preferably dispose of the product by use. Otherwise dispose of product and packaging at an approved landfill or other approved facility. Burn empty container in an appropriate incinerator, if circumstances such as wind direction permit. Otherwise crush or puncture and bury in a suitable landfill. |
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| Precautions: | Do NOT use container for any other purpose. Do not flush into drain or natural waterways. Do not reuse container. |
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SECTION 14: TRANSPORT INFORMATION

This product is classified as a Dangerous Good for transport in NZ; NZS 5433:2012

Road and Rail Transport

UN No: 3082
Class-primary 9
Packing Group III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Air Transport

UN No: 3082
Class-primary 9
Packing Group III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Marine Transport

UN No: 3082
Class-primary 9
Packing Group III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Limited Quantities Statement:

If the product's individual container is below 5L, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

SECTION 15: REGULATORY INFORMATION

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| Regulatory status: | Approved pursuant to the HSNO Act, EPA Approval Code HSR100758 See www.epa.govt.nz for approval conditions. |
| HSW (HS) Regulations 2017 | Trigger Quantity |
| Certified Handler | Not required |
| Location Certificate | Not required |



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| Tracking Trigger Quantities | Not required |
| Signage Trigger Quantities | 100kg (9.1A) |
| Emergency Response Plan | 100kg (9.1A) |
| Secondary Containment | 100kg (9.1A) |
| HSNO Additional Controls (Restrictions of use) | |
| 77A | Refer to Controls document on EPA website for HSR100758 |
| Hazardous Property Controls Notice 2017 | |
| HPC Notice Part 4 Clause 47 | Equipment for class 9 substances must be appropriate |
| HPC Notice Part 4 Clause 48 | Records of application of class 9 pesticides and plant growth regulators |
| HPC Notice Part 4 Subpart A | Site and storage controls for class 9 substances |
| ACVM Approval No: | A011742 |

SECTION 16: OTHER INFORMATION

Glossary

EC50 Median effective concentration.

EEL Environmental Exposure Limit.

EPA Environmental Protection Authority

HSNO Hazardous Substances and New Organisms.

HSW Health and Safety at Work.

LC50 Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.

LD50 Lethal dose to kill 50% of test animals/organisms.

LEL Lower explosive level.

OSHA American Occupational Safety and Health Administration.

TEL Tolerable Exposure Limit.

TLV Threshold Limit Value-an exposure limit set by responsible authority.

UEL Upper Explosive Level

WES Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017



This Safety Data Sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. ALLEVA Animal Health Limited makes no warranty with respect hereto and disclaims all liability from reliance thereon.

Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

PLEASE READ ALL LABELS CAREFULLY BEFORE USING PRODUCT.

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