



SAFETY DATA SHEET

According to
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

Section 1. Identification of the material and the supplier

Product: **Techmulin 2.5% Premix**
Product Use: For the control and treatment of chronic respiratory disease in poultry. For the control of swine enzootic (Mycoplasmal) pneumonia, and prevention and treatment of swine dysentery in pigs.
Restriction of Use: Refer to Section 15
New Zealand Supplier: **Agrihealth NZ Ltd**
Address: Level 2, 89 Grafton Road, Auckland 1010
Telephone: +64 9 215 1199
Emergency No: **0800 764 766 (National Poisons Centre)**
Date of SDS Preparation: 01 May 2025

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No: HSR100759 – Veterinary Medicines (Non-dispersive Open System Application) Group Standard 2020

Pictograms

Not required

Signal Word: **Warning**

GHS Category	Hazard Code	Hazard Statement
Skin irritation Cat. 2	H316	Causes mild skin irritation

Prevention Code	Prevention Statement
-	-

Response Code	Response Statement
P332 + P313	If skin irritation occurs: Get medical advice/attention

Storage Code	Storage Statement
-	-

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

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
Tiamulin hydrogen fumarate	2.5%	55297-96-6
Non-hazardous components	97.5%	-

Section 4. First Aid Measures

Routes of Exposure:

If Swallowed	Wash out mouth with water. Never give anything by mouth to an unconscious person. Get medical attention.
If Inhaled	Remove person to fresh air. Allow person to assume most comfortable position for breathing. If not breathing, initiate cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Get medical attention.
If in Eyes	Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists.
If on Skin	Wash with plenty of soap and water. Remove and wash contaminated clothing. If skin irritation persists: get medical advice/attention.
Precautions	In case of hypersensitivity to the substance, avoid direct contact.

Most important symptoms and effects, both acute and delayed symptoms:

Ingestion:	No data available
Inhalation:	No data available
Skin:	No data available
Eye:	No data available

Section 5. Fire Fighting Measures

Hazard Type	No data available
Hazards from combustion products	May emit toxic fumes under fire conditions. They are carbon monoxide, carbon dioxide, nitrogen oxides and sulphur oxides.
Suitable Extinguishing media	Water spray, dry powder, carbon dioxide, or foam. Use extinguishing media suitable for surrounding fire.
Precautions for firefighters and special protective clothing	As with all fires, evacuate personnel to safe area. Fire fighters should use self-contained breathing equipment and protective clothing.
HAZCHEM CODE	3Z

Section 6. Accidental Release Measures

Wear protective gear as detailed in Section 8. Evacuate all unnecessary personnel.

Restrict access to contaminated area. Prevent further spillage, and prevent spilled material from flowing onto adjacent land or into waterways. Retrieve intact containers from site. Place damaged containers into containment devices. In case of spillage, contain the dry material by sweeping or vacuuming. Vacuuming may disperse dust if appropriate dust collection filter is not part of the vacuum. Be aware of potential for dust explosion when using electrical equipment. If vacuum is not available, lightly mist material and remove by sweeping or wet wiping. Clean the

contaminated area with new polyurethane sponge, soaked in water. Place the spillage in a container for waste disposal. Avoid contamination of water courses or sewers.

Dispose of waste according to the applicable local and national regulations.

Section 7. Handling and Storage

Precautions for Handling:

- Use personal protective clothing and equipment as detailed in section 8
- Use local exhaust hood in the facility (recommended)

Precautions for Storage:

- Store below 25°C, excursions permitted to 40°C

Section 8. Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

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

No ingredient has a known exposure standard.

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 APR 2022 13TH EDITION.

Engineering Controls

Engineering controls should be used as the primary means to control exposures. General room ventilation is adequate unless the process generates dust, mist or fumes. Local exhaust hood and general exchange are recommended.

Personal Protection Equipment



Eyes	Safety glasses or goggles
Hands	Wear impervious gloves if skin contact is possible
Skin	Use protective clothing (uniforms, lab coats, disposable coveralls, etc.) in both production and laboratory areas
Respiratory	Wear suitable respiratory equipment such as anti-dust mask (respirator) or local respiratory system
General	Do not eat, drink or smoke when using this product. Wash hands with soap and water before breaks and after work. Keep away from foodstuffs and beverages

Section 9 Physical and Chemical Properties

Appearance	Powder
Colour	White to pale yellow
Odour	Not available
Odour Threshold	Not available
pH	Not available

Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Specific Gravity	Not available
Solubility	Not available
Partition Coefficient n-octanol/water:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available
Specific optical rotation (0.5% in dioxane)	Not available
pKa	Not available
Minimum cloud ignition temperature	Not available
Minimum ignition energy	Not available
Electrical volume resistivity	Not available

Section 10. Stability and Reactivity

Stability of Substance	Stable non-reactive dry product in powder form
Possibility of hazardous reactions	No data available
Conditions to Avoid	Moisture
Incompatible Materials	Strong oxidizing materials
Hazardous Decomposition Products	Not available

Section 11 Toxicological Information

Acute toxicity:

Component		Species	Test results
Tiamulin hydrogen fumarate	Acute oral LD ₅₀	Rat	2.74 g/kg b.w. (male) 1.83 g/kg b.w. (female)
	Acute IV LD ₅₀	Rat	0.02 g/kg b.w.
	Acute SC LD ₅₀	Rat	4.38 g/kg b.w.
	Acute oral LD ₅₀	Mouse	0.77 g/kg b.w. (male) 0.65 g/kg b.w. (female)
	Acute IV LD ₅₀	Mouse	0.049 g/kg b.w.
	Acute SC LD ₅₀	Mouse	1.02 g/kg b.w.

Skin corrosion/irritation: No data available
 Serious eye damage/irritation: No data available
 Respiratory or skin sensitization: No data available

Chronic Effects:

Tiamulin hydrogen fumarate:

Carcinogenicity	2 years Mouse Oral Not carcinogenic 2.5 years Rat Oral Not carcinogenic
Reproductive Toxicity	Foetotoxicity/maternal toxicity Rat Oral 100 mg/kg/day, NOEL No effects observed
Germ Cell Mutagenicity	Bacterial mutagenicity (Ames) Salmonella Negative <i>In vitro</i> mammalian cell Chinese hamster cells Negative <i>In vivo</i> micronucleus Mouse Negative
Aspiration	No data available
STOT/SE	No data available
STOT/RE	No data available

Section 12. Ecotoxicological Information

Tiamulin hydrogen fumarate:

Species	Test	Result
Blue-green algae (<i>Anabaena flos-aquae</i>)	72-hour median effective concentration EC ₅₀ (growth)	0.29 mg/L
Green algae (<i>Selensatrum capricornutum</i>)	72-hour median effective concentration EC ₅₀ (growth)	0.165 mg/L
<i>Daphnia magna</i>	48-hour median effective concentration EC ₅₀ (immobilisation):	40 mg/L
<i>Daphnia magna</i>	48-hour median effective concentration EC ₅₀ (reproduction):	5.4 mg/L
<i>Daphnia magna</i>	48-hour median effective concentration EC ₅₀ (survival):	67 mg/L
Fish (<i>Oncorhynchus mykiss</i>)	96-hour median lethal concentration LC ₅₀	20 mg/L
Collembolans (<i>Folsomia fimetaria</i>)	Median lethal concentration LC ₅₀	≥ 5000 mg/kg
Collembolans (<i>Folsomia fimetaria</i>)	Median effective concentration EC ₅₀ (reproduction)	475 mg/kg
Enchytraeids (<i>Enchytraeus crypticus</i>)	No observed effect concentration NOEC (survival)	> 5000 mg/kg
Earthworms (<i>Apporectodea caliginosa</i>)	14-day median lethal concentration LC ₅₀	> 1000 mg/kg
Monocotyledon (wheat)	Median effective concentration EC ₅₀ (shoot weight)	211.19 mg/kg
Dicotyledon (French bean)	Median effective concentration EC ₅₀ (shoot weight)	481.72 mg/kg
Dicotyledon (radish)	Median effective concentration EC ₅₀ (shoot weight)	47.88 mg/kg
Dicotyledon (courgette)	median effective concentration EC ₅₀ (shoot weight)	117.80 mg/kg
Dicotyledon (sunflower)	median effective concentration EC ₅₀ (shoot weight)	73.35 mg/kg

Product:	Tiamulin hydrogen fumarate
Persistence and degradability	Log Kow: -0.05-0.02; 0.27-0.51; 0.9; 2.1-2.2 (respectively at pH 4.1, 5, 6, 7)
pKa	7.64
Water solubility (25°C)	5.8% w/v
Bioaccumulation	No data available

Mobility in Soil	No data available
Results of PBT and VPVB assessment	Tiamulin is not classified as a PBT or vPvB substance

Section 13. Disposal Considerations

Disposal Method:

Dispose of waste in accordance with all applicable laws and regulations.

Precautions or methods to avoid: Avoid release to the environment.

Section 14 Transport Information

This product is not classified as a Dangerous Good for transport in NZ; NZS 5433:2020

Road, Rail, Sea and Air Transport

UN No	N/A
Class - Primary	N/A
Packing Group	N/A
Proper Shipping Name	N/A
Marine Pollutant	No
Special Provisions	N/A

Section 15 Regulatory Information

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No: HSR100759

HSW (HS) Regulations 2017	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities (Schedule 26)	Not required
Signage Trigger Quantities (Schedule 3)	Not required
Emergency Response Plan (Schedule 5)	Not required
Secondary Containment (Schedule 5)	Not required
Restriction of Use	None known
ACVM Act and Regulations	
See www.foodsafety.govt.nz for registration Conditions	ACVM Registration Number A04209

Section 16 Other Information

Glossary

Cat	Category
EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	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 April 2022 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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Please contact the New Zealand distributor, if further information is required.

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