



SAFETY DATA SHEET

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

Section 1 Identification of the material and the supplier

Product:
Product Use:

PenethaOne

Powder vial with diluent vial for reconstitution, for the treatment of mastitis, uterine and respiratory infections and foot-rot in cattle, caused by penicillin-sensitive Gram-positive bacteria

Restriction of Use:

Refer to Section 15

New Zealand Supplier:
Address:

Agrihealth NZ Ltd

Level 2, 89 Grafton Road,
Auckland 1010

Telephone:

+64 9 215 1199

Emergency No:

0800 764 766 (National Poisons Centre)

Date of SDS Preparation: 07 January 2026

Section 2 Hazards Identification

The diluent is a non-hazardous substance.

The content of this Safety Data Sheet applies to the powder vial, and to the solution of PenethaOne after reconstitution using the diluent.

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

EPA Approval No: HSR100757; Veterinary medicines (Limited pack size, finished dose) Group Standard 2020

Pictograms



Signal Word: **WARNING**

GHS Category	Hazard Code	Hazard Statement
Skin sensitisation Cat. 1	H317	May cause an allergic skin reaction
Hazardous to the aquatic environment acute Cat. 1	H400	Very toxic to aquatic life
Hazardous to the aquatic environment chronic Cat. 1	H410	Very toxic to aquatic life with long lasting effects
Hazardous to terrestrial vertebrates		Hazardous to terrestrial vertebrates

Prevention Code	Prevention Statement
P102	Keep out of reach of children
P103	Read label before use
P261	Avoid breathing dust, fumes, gas, mist, vapours or spray
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

Response Code	Response Statement
P391	Collect spillage
P302 + P352	IF ON SKIN: Wash with plenty of soap and water
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention
P362 + P364	Take off contaminated clothing and wash it before reuse

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

Section 3 Composition / Information on Hazardous Ingredients

Powder vial with diluent vial for reconstitution and injection.

Each vial of powder contains 5 MIU, 10 MIU or 15 MIU of penethamate hydriodide.

Each vial of diluent contains 18mL or 36mL of water and other non-hazardous ingredients.

Powder vial:

Ingredients	Wt%	CAS NUMBER
Penethamate hydriodide	99.5%	808-71-9
Non-hazardous	0.5%	N/A

Diluent vial:

Ingredients	Wt%	CAS NUMBER
Water	95.7%	7732-18-5
Non-hazardous	4.3%	N/A

Section 4 First Aid Measures

General Penethamate is an ester of benzylpenicillin. Penicillins may cause hypersensitivity (allergy) following injection, inhalation, ingestion or skin contact. Do not handle this product if you know you are sensitised, or if you have been advised not to work with such preparations.

Routes of Exposure:

If in Eyes Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, seek medical advice or attention.

If on Skin Wash with plenty of soap and water. If skin irritation or rash occurs: get medical advice/attention.

If Swallowed If swallowed seek medical attention. Do not induce vomiting. Rinse mouth.

If 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. Apply artificial

respiration if not breathing. If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

Accidental self-injection: Care should be taken to avoid accidental self-injection. If injection occurs, seek medical attention immediately.

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

Ingestion:	None known
Inhalation:	None known
Skin:	May cause an allergic reaction
Eye:	None known

Section 5 Fire Fighting Measures

Hazard Type	Non-Flammable
Hazards from combustion products	This material is assumed to be combustible. When heated to decomposition toxic fumes may be emitted
Suitable Extinguishing media	Water spray, dry powder, carbon dioxide, or foam
Precautions for firefighters and special protective clothing	Wear full protective clothing and self-contained breathing apparatus (SCBA)
HAZCHEM CODE	2Z

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:

- Read label before use
- Avoid breathing dust, mist or spray
- Wear protective gloves. Avoid contact with skin and eyes
- Contaminated work clothing should not be allowed out of the workplace
- People with known hypersensitivity to penicillin should handle the product carefully
- Care should be taken to avoid self-injection

Precautions for Storage:

- Store away from incompatible materials listed in Section 10
- Store below 25°C
- Store in the original container, away from direct heat or direct sunlight and away from foodstuffs
- Keep out of reach of children

Section 8**Exposure Controls / Personal Protection****WORKPLACE EXPOSURE STANDARDS (provided for guidance only)**

Substance	TWA ppm	STEL ppm	mg/m³	mg/m³
------------------	-------------------	--------------------	-------------------------	-------------------------

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.

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	Fine powder (and clear, colourless, liquid diluent)
Colour	Cream-white
Odour	Characteristic
Odour Threshold	Not available
pH	4.5 – 6.5
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Non flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Specific Gravity	Not available
Water Solubility	Slightly soluble in water (0.96% at 20°C)
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available

Kinematic Viscosity	Not available
Particle Characteristics	Not available

Section 10 Stability and Reactivity

Stability of Substance	This product is stable under normal conditions
Possibility of hazardous reactions	Hazardous polymerisation does not occur
Conditions to Avoid	Avoid heat, light and moisture
Incompatible Materials	Strong oxidisers
Hazardous Decomposition Products	Not available

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable
Dermal	Not applicable
Inhalation	Not applicable
Eye	Not applicable
Skin	May cause an allergic skin reaction

Chronic Effects:

Carcinogenicity	Not applicable
Reproductive Toxicity	Not applicable
Germ Cell Mutagenicity	Not applicable
Aspiration	Not applicable
STOT/SE	Not applicable
STOT/RE	Not applicable

Individual component information:

Acute Toxicity:

Chemical Name	Oral – LD ₅₀	Subcutaneous administration – LD ₅₀	Intraperitoneal administration – LD ₅₀	Intravenous administration – LD ₅₀
Penethamate hydriodide	2,000 mg/kg	2,000 mg/kg	300 - 1650 mg/kg	30 - 90 mg/kg

Section 12 Ecotoxicological Information

Very toxic to aquatic life with long lasting effects. Hazardous to terrestrial vertebrates.

Product:	No data available
Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available

Individual component information (Please refer to www.epa.govt.co.nz for full details):

Penethamate hydriodide – no data available

Cross-reference to penicillin G sodium (CAS number 69-57-8)

Route	Species	Duration	Value LC ₅₀ /EC ₅₀
Acute aquatic, algae	<i>Microcystis aeruginosa</i> (blue-green algae)	7 day EC50 POP CHLO	0.006 mg/L (0.004 - 0.012 mg/L)

Do not allow to enter waterways. Avoid release to the environment. Collect spillage.

Section 13 Disposal Considerations

Disposal Method:

Dispose of waste in accordance with all applicable laws and regulations. Member State specific and Community specific provisions must be considered. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimisation be practiced. The best available technology should be utilised to prevent environmental releases. This may include destructive techniques for waste and wastewater.

Ensure any container holding waste product or contaminated spill media is labelled "Hazardous Waste – Ecotoxic" and that the label also has the appropriate pictograms from section 2, waste type identifier, and the business name, address, and phone number.

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

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ; NZS 5433:2020



Road, Rail, Sea and Air Transport

UN No	3077
Class - Primary	9
Packing Group	III
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (penethamate hydriodide)
Marine Pollutant	Yes
Special Provisions	If the product's individual container is below 5L/kg, 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

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

EPA Approval No: HSR100757; Veterinary medicines (Limited pack size, finished dose) Group Standard 2020

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)	100 kg
Emergency Response Plan (Schedule 5)	100 kg
Secondary Containment (Schedule 16)	100 L
Restriction of Use	Only use for the intended purpose.
ACVM Act and Regulations	

See www.foodsafety.govt.nz for registration
Conditions

A11828

Section 16

Other Information

Glossary

	Category
Cat	
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

This document has been prepared by AgriHealth NZ Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to AgriHealth NZ Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While AgriHealth NZ Ltd have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, AgriHealth NZ Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

The information herein is given in good faith, but no warranty, express or implied is made.

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

Issue Date:

07 January 2026

Review Date:

07 January 2031