

SAFETY DATA SHEET

Zoetis New Zealand Limited



Section 1: Identification of the Substance and Supplier

Trade Name:	LINCOMIX[®] Premix
ACVM Registration No.:	A003661
Classification:	Restricted Veterinary Medicine (RVM)
Recommended Use:	Oral antibiotic for use in broiler chickens as an aid in control of necrotic enteritis caused by organisms susceptible to lincomycin, and in swine as an aid in treatment of mycoplasmal pneumonia and swine dysentery, and for the prevention and control of proliferative enteritis associated with <i>Lawsonia intracellularis</i> (ileitis).
Company Details:	Zoetis New Zealand Limited
Address:	Level 5, 8 Mahuhu Crescent Auckland Central Auckland 1010 New Zealand
Telephone No.:	0800 963 847 (Business Hours)
Emergency Telephone No.:	National Poisons Centre: 0800 POISON (0800 764 766) Emergency Services: In an emergency dial 111
Date of Preparation:	30 June 2014

Section 2: Hazards Identification

Hazard Classification:	Not applicable
Priority Identifier(s):	KEEP OUT OF REACH OF CHILDREN
Secondary Identifier(s):	Not applicable

Section 3: Composition / Information on Ingredients

Chemical Identity of Ingredients

Ingredient	CAS No.	Concentration
Lincomycin hydrochloride	859-18-7	110.0 g/kg
Other ingredients determined not to be hazardous.	-	-

This is a commercial product whose exact ratio of components may vary.
Trace quantities of impurities are also likely.

Section 4: First Aid Measures

Necessary First Aid Measures:	<p>For advice contact the National Poisons Centre at 0800 POISON (0800 764 766) or a doctor immediately. If the patient is not breathing begin artificial respiration and seek medical advice immediately. Never give fluids or induce vomiting if a patient is unconscious or convulsing, regardless of injury.</p> <p>Ingestion: DO NOT induce vomiting. If the patient is conscious wash mouth out with water. Do not give anything by mouth to an unconscious person. Seek medical advice immediately.</p> <p>Eye Contact: Flush the eye(s) out with running water for at least 15 minutes. Removal of contact lenses should be done with caution within 5 minutes of exposure. If symptoms develop seek medical advice immediately.</p> <p>Skin Contact: Remove any contaminated clothing and wash the affected area immediately with soap and water. If symptoms develop seek medical advice immediately.</p> <p>Inhalation: Move the patient to fresh air. If symptoms develop seek medical advice immediately.</p>
Poisoning Symptoms:	Known clinical effects include abdominal cramping, nausea, vomiting, diarrhoea, and mild allergic skin rashes.
Workplace Facilities:	No specific facilities required. Standard emergency equipment must be available.
Hygiene Practices:	Avoid ingestion, contact with skin and eyes, and inhalation of dusts, mists or vapours. Do not eat, drink or smoke while using this product. Wash hands and exposed skin before eating, drinking or smoking and after work. Wash any protective clothing after use.
Notes for Medical Personnel:	Lincomycin has been shown to have neuromuscular blocking properties that may enhance the action of other neuromuscular blocking agents. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Note the nature of this product.

Section 5: Fire-Fighting Measures

Type of hazard:	This product is non-flammable, non-combustible and non-explosive.
Fire Hazard Properties:	Hazardous combustion products include carbon monoxide, carbon dioxide, oxides of nitrogen and sulphur, hydrochloric acid.
Regulatory Requirements:	Not applicable.
Extinguishing Media & Methods:	Use dry chemical, foam, carbon dioxide or water to extinguish fires involving this product.
Hazchem Code:	Not allocated.
Recommended Protective Clothing:	During large-scale fire fighting operations wear approved positive pressure, self-contained breathing apparatus and full protective turn-out gear.

Section 6: Accidental Release Measures

Personal Precautions:	Personnel involved in clean-up should wear appropriate personal protective equipment to minimise exposure. This may include eye protection, chemically resistant gloves, boots and overalls.
Environmental Precautions:	Prevent material from entering surface water drains or waterways. If a significant quantity of material enters drains, advise emergency services.
Procedure for Spills:	<ol style="list-style-type: none">1. Non-essential personnel should be evacuated from the affected area.2. Stop leak and contain the source of spill if it is safe to do so. Reposition any leaking containers to minimise further leakage.3. Absorb the spill with an absorbent material (e.g. sand).4. Collect the spilled material into labelled containers for disposal, minimising dust generation.5. Decontaminate the spill area thoroughly with detergent and water, preventing runoff from entering drains.
Procedure for Disposal:	Contaminated material must be disposed of at an approved landfill or other approved facility in accordance with local, regional and national requirements. Avoid contamination of any water supply with product or empty container.

Section 7: Handling and Storage

Handling

Precautions for Safe Handling:	No special technical protective measures required. No special handling advice required.
Regulatory Requirements:	Not required.
Handling Practices:	Avoid ingestion, contact with skin and eyes, and inhalation of dusts, mists or vapours. Do not eat, drink or smoke while handling this product. Wash hands and exposed skin before eating, drinking or smoking and after work. Wash any protective clothing after use.
Approved Handlers:	Approved handlers are not required for this product.

Storage

Conditions for Safe Storage:	Store below 30°C (Room Temperature). Keep out of reach of children. Store in a well ventilated area in the original container, tightly closed, away from foodstuffs.
Store Site Requirements:	No additional requirements.
Packaging:	Store in the original container, away from foodstuffs.

Section 8: Exposure Control / Personal Protection

Always Read and Follow the Label Instructions and Warnings

Workplace Exposure Guidelines

Workplace Exposure Standards:	A time weighted average (TWA) concentration for an 8-hour day and a 5-day week has not been established by NOHSC Australia for any of the major ingredients in this product. There is a blanket limit of 10 mg/m ³ for dusts or mists when limits have not otherwise been established.
Application in the Workplace:	The nature of this product makes it unlikely that this level will be approached during normal handling.
Exposure Standards Outside the Workplace:	None set.
Engineering Controls:	Engineering controls should be used as the primary means to control exposures. Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.
Personal Protection:	<p>The following instructions are for those coming into frequent and / or lengthy contact with this product. For occasional handling employ precautions suitable for the conditions under which the product is being handled.</p> <p>Hands: Impervious gloves are recommended if skin contact is possible and for bulk processing operations.</p> <p>Eyes: It is always prudent to utilise protective eyewear.</p> <p>Skin: When prolonged or frequently repeated contact could occur, utilise chemically protective clothing. Selection of specific items such as a face shield, gloves, boots, or overalls will depend on the situation.</p> <p>Respiratory: Respiratory protection is not normally required; however, if necessary utilise an air-purifying respirator that complies with NZ standards.</p>
General Hygiene:	Change work clothes regularly. Avoid ingestion, contact with skin and eyes, and inhalation of dusts, mists or vapours. Do not eat, drink or smoke while handling this product. Wash hands and exposed skin before eating, drinking or smoking and after work. Wash any protective clothing after use.

Section 9: Physical and Chemical Properties

Appearance:	Off-white to light tan powder
Odour:	No data available
Specific Gravity / Density:	No data available
Melting Point:	No data available
Freezing Point:	No data available
pH:	No data available
Solubility in Water:	Rice mill feed carrier is insoluble. Lincomycin hydrochloride is soluble in water and may be leached out of the product. Solubility of lincomycin is > 500 mg/mL.
Flashpoint:	Not applicable. This product is not flammable
Oxidising Properties:	Not applicable. This product is not an oxidiser
Corrosive Properties:	Not applicable. This product is not corrosive
Vapour Pressure:	Not applicable

Section 10: Stability and Reactivity

Stability of the Substance:	This product is stable under normal conditions of use.
Conditions to Avoid:	Store as recommended. No special conditions to avoid.
Material to Avoid:	As a precautionary measure, keep away from strong oxidisers.
Hazardous Decomposition Products:	This product is unlikely to spontaneously decompose. Hazardous combustion products include carbon monoxide, carbon dioxide, oxides of nitrogen and sulphur, hydrochloric acid.
Hazardous Polymerisation:	This product is unlikely to spontaneously polymerise.
Specific Data:	No specific data available.

Section 11: Toxicological Information

HSNO Classifications

Not applicable. This product is not classified as toxic.

Acute Effects

Acute Toxicity:	Lincomycin hydrochloride (Species, Route, End Point, Dose): <ul style="list-style-type: none">• Rat Oral LD₅₀ > 4000 mg/kg• Rat Intravenous LD₅₀ 342 mg/kg• Mouse Intravenous LD₅₀ 214 mg/kg• Rat Subcutaneous LD₅₀ 9778 mg/kg
Eye Contact:	Data suggests that this product should present no significant problems to typical persons if used as intended.
Skin Contact:	Data suggests that this product should present no significant problems to typical persons if used as intended.
Inhalation:	Data suggests that this product should present no significant problems to typical persons if used as intended.

Chronic / Long Term Effects

Repeated overexposure may cause abdominal cramps, diarrhoea and colitis. This may begin several weeks after exposure has ceased.

Reproduction & Developmental Toxicity:	Lincomycin hydrochloride: (Study Type, Species, Route, Dose, End Point, Effect(s)) <ul style="list-style-type: none">• 2 Generation Reproductive Toxicity Rat Oral 100 mg/kg LOAEL Fetotoxicity• Prenatal & Postnatal Development Rat Oral 100 mg/kg NOEL Not Teratogenic
Genetic Toxicity:	Lincomycin hydrochloride: (Study Type, Cell Type/Organism, Result) <ul style="list-style-type: none">• Bacterial Mutagenicity (Ames) <i>Salmonella</i> Negative• Mammalian Cell Mutagenicity Mouse Lymphoma Negative• <i>In Vivo</i> Micronucleus Negative• Direct DNA Interaction Negative
Carcinogenicity:	Not listed as a carcinogen by IARC, NTP or US OSHA.

Section 12: Ecotoxicity Information

HSNO Classifications

Not applicable. This product is not classified as ecotoxic.

The environmental characteristics of this material have not been fully evaluated.
Avoid contamination of any water supply with product or empty container.

Ecotoxicity Effects

Toxicity to Birds:	Not applicable
Acute Toxicity to Fish:	Lincomycin hydrochloride: (Species, Method, End Point, Duration, Result) <ul style="list-style-type: none">• Rainbow Trout OECD LC-50 96 Hours 980 mg/L• Daphnia OECD LC-50 48 Hours >900 mg/L• Algal Growth Inhibition OECD LC-50 96 Hours 980 mg/L
Toxicity to Algae:	Not applicable
Toxicity to Aquatic Invertebrates:	Not applicable
Toxicity to Soil Dwelling Organisms:	Not applicable
Acute Toxicity to Bees:	Not applicable

Environmental Fate

Mobility:	Lincomycin hydrochloride melts with decomposition at 148°C. It has no measurable vapour pressure; therefore, it is not expected to enter the air. Lincomycin hydrochloride is very soluble in water (500 -1,000 mg/mL) and undergoes hydrolysis at both acid and base pHs at elevated temperatures. Lincomycin can be sorbed to soil, but is readily leached away from soils, lincomycin is expected to be relatively mobile and migrate toward the aquatic compartment.
Persistence / Biodegradability:	Lincomycin hydrochloride can undergo hydrolysis at both acid and base pHs at elevated temperatures; however, in the pH range 3-6 at room temperature, degradation is small. Lincomycin bioactivity is readily degraded by mixtures of urine, faeces and soil. The half-life of degradation was about 20 days.
Bioaccumulative Potential:	Lincomycin has a low octanol-water partition coefficient at all pHs. The octanol-water partition at pH 7 is 2.550. Calculated flowing and static bioaccumulation factors are 2.21 and 9.96, respectively. Lincomycin will be expected to migrate to the aquatic environment, but it should not bioaccumulate in aquatic organisms.
Abiotic Potential:	Lincomycin will have some initial inhibitory effects on the most sensitive microorganisms until it is degraded. Small amounts sent to sanitary sewage will not adversely affect the abiotic flora of sewage treatment facilities.

Section 13: Disposal Considerations

Product Disposal:	Preferably dispose of product by use in accordance with label directions. Otherwise dispose of product at an approved landfill, or other approved facility in accordance with local, regional and national regulations. Avoid contamination of any water supply with product.
Container Disposal:	Dispose of empty containers by wrapping in paper and putting in garbage for disposal at an approved landfill, or other approved facility in accordance with local, regional and national regulations. Avoid contamination of any water supply with empty container. Used needles and syringes should immediately be placed in a designated and appropriately labelled "sharps" container.

