

# SAFETY DATA SHEET

Zoetis New Zealand Limited



## Section 1: Identification of the Substance and Supplier

<b>Trade Name:</b>	<b>LINCO-SPECTIN® Soluble Powder</b>
<b>ACVM Registration No.:</b>	A002098
<b>Classification:</b>	Restricted Veterinary Medicine (RVM)
<b>Recommended Use:</b>	Injectable antibiotic for use in poultry as an aid in treatment and prevention of chronic respiratory disease associated with mycoplasma and coliform infections, and in swine for treatment of swine dysentery, bacterial enteritis caused by <i>E. coli</i> or Salmonella, infectious arthritis alone or complicated by septicaemia, arthritis caused by streptococci, staphylococci and mycoplasma organisms.
<b>Company Details:</b>	Zoetis New Zealand Limited
<b>Address:</b>	Level 4, 8 Mahuhu Crescent Auckland Central Auckland 1010 New Zealand
<b>Telephone No.:</b>	0800 963 847 (Business Hours)
<b>Emergency Telephone No.:</b>	National Poisons Centre: 0800 POISON (0800 764 766) Emergency Services: In an emergency dial 111
<b>Date of Preparation:</b>	1 July 2019

## Section 2: Hazards Identification

<b>Hazard Classification:</b>	6.1E, 6.4A
<b>Priority Identifier(s):</b>	WARNING – KEEP OUT OF REACH OF CHILDREN
<b>Secondary Identifier(s):</b>	6.1E May be harmful if swallowed, inhaled or absorbed through the skin. 6.4A May cause eye irritation. Avoid contact with the eyes.

## Section 3: Composition / Information on Ingredients

### Chemical Identity of Ingredients

Ingredient	CAS No.	Concentration
Lincomycin (as Lincomycin hydrochloride)	859-18-7	220 g/kg
Spectinomycin (as Spectinomycin sulphate tetrahydrate)	64058-48-6	445 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

<b>Necessary First Aid Measures:</b>	<p><b>For advice contact the National Poisons Centre at 0800 POISON (0800 764 766) or a doctor immediately.</b> 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><b>Self-Injection:</b> Immediate medical advice should be sought on the management of <b>all</b> instances of accidental self-injection, particularly those near a joint or associated with bruising. Allow the wound to bleed freely and avoid squeezing the injection site to avoid spread of the product. Clean the wound thoroughly with soap and water, then keep it clean and dry.</p> <p><b>Ingestion:</b> 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><b>Eye Contact:</b> 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><b>Skin Contact:</b> Remove any contaminated clothing and wash the affected area immediately with soap and water. If symptoms develop seek medical advice immediately.</p> <p><b>Inhalation:</b> Move the patient to fresh air. If symptoms develop seek medical advice immediately.</p>
<b>Poisoning Symptoms:</b>	Overexposure may cause skin, eye and upper respiratory tract irritation or allergic reactions. Repeated over exposure to lincomycin hydrochloride may cause abdominal cramps, diarrhoea and colitis. This may begin several weeks after exposure has ceased. Hypersensitivity to lincomycin or clindamycin may be aggravated by exposure.
<b>Workplace Facilities:</b>	No specific facilities required. Standard emergency equipment must be available.
<b>Hygiene Practices:</b>	Avoid self-injection, 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.
<b>Notes for Medical Personnel:</b>	Accidental self-injection may lead to an inflammatory response and deep injections, particularly those near a joint or associated with bruising should be treated medically or surgically. 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

<b>Type of hazard:</b>	This product is not flammable, however, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.
<b>Fire Hazard Properties:</b>	Hazardous combustion products include carbon monoxide, carbon dioxide, oxides of nitrogen and sulphur, hydrochloric acid, hydrogen chloride and other chlorine and sulphur containing compounds.
<b>Regulatory Requirements:</b>	Not applicable.
<b>Extinguishing Media &amp; Methods:</b>	Use dry chemical, foam, carbon dioxide or water to extinguish fires involving this product.
<b>Hazchem Code:</b>	Not allocated.
<b>Recommended Protective Clothing:</b>	During large-scale fire fighting operations wear approved positive pressure, self-contained breathing apparatus and full protective turn-out gear. Evacuate area and fight fire from a safe distance.

## Section 6: Accidental Release Measures

<b>Personal Precautions:</b>	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.
<b>Environmental Precautions:</b>	Prevent material from entering surface water drains or waterways. If a significant quantity of material enters drains, advise emergency services.
<b>Procedure for Spills:</b>	<ol style="list-style-type: none"><li>1. Non-essential personnel should be evacuated from the affected area.</li><li>2. Stop leak and contain the source of spill if it is safe to do so. Reposition any leaking containers to minimise further leakage.</li><li>3. Absorb the spill with an absorbent material (e.g. sand).</li><li>4. Collect the spilled material into labelled containers for disposal, minimising dust generation.</li><li>5. Decontaminate the spill area thoroughly with detergent and water, preventing runoff from entering drains.</li></ol>
<b>Procedure for Disposal:</b>	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

<b>Precautions for Safe Handling:</b>	No special technical protective measures required. No special handling advice required.
<b>Regulatory Requirements:</b>	Not required.
<b>Handling Practices:</b>	Avoid self-injection, 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.
<b>Approved Handlers:</b>	Approved handlers are not required for this product.

### Storage

<b>Conditions for Safe Storage:</b>	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.
<b>Store Site Requirements:</b>	No additional requirements.
<b>Packaging:</b>	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

<b>Workplace Exposure Standards:</b>	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 <sup>3</sup> for dusts or mists when limits have not otherwise been established.
<b>Application in the Workplace:</b>	The nature of this product makes it unlikely that this level will be approached during normal handling.
<b>Exposure Standards Outside the Workplace:</b>	None set.
<b>Engineering Controls:</b>	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.
<b>Personal Protection:</b>	<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><b>Hands:</b> Impervious gloves are recommended if skin contact is possible and for bulk processing operations.</p> <p><b>Eyes:</b> It is always prudent to utilise protective eyewear.</p> <p><b>Skin:</b> 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><b>Respiratory:</b> Respiratory protection is not normally required; however, if necessary utilise an air-purifying respirator that complies with NZ standards.</p>
<b>General Hygiene:</b>	Change work clothes regularly. Avoid self-injection, 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

<b>Appearance:</b>	White powder
<b>Odour:</b>	Slight
<b>Density:</b>	No data available
<b>Melting Point:</b>	148°C
<b>Boiling Point:</b>	Not applicable
<b>pH:</b>	No data available
<b>Solubility in Water:</b>	Very soluble (500 -1,000 mg/mL)
<b>Flashpoint:</b>	Not applicable. This product is not flammable
<b>Oxidising Properties:</b>	Not applicable. This product is not an oxidiser
<b>Corrosive Properties:</b>	Not applicable. This product is not corrosive
<b>Vapour Pressure:</b>	Not applicable

## Section 10: Stability and Reactivity

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

## Section 11: Toxicological Information

### HSNO Classifications

- 6.1E** May be harmful if swallowed, inhaled or absorbed through the skin.
- 6.4A** May cause eye irritation. Avoid contact with the eyes.

### Acute Effects

<b>Acute Toxicity:</b>	Lincomycin hydrochloride: <ul style="list-style-type: none"><li>• Intravenous LD<sub>50</sub> (Rat): 342 mg/kg</li><li>• Intravenous LD<sub>50</sub> (Mouse): 214 mg/kg</li><li>• Oral LD<sub>50</sub> (Rat): &gt;4,000 mg/kg</li><li>• Intraperitoneal (Mouse): 1,000 mg/kg</li><li>• Subcutaneous LD<sub>50</sub> (Rat): 9,778 mg/kg</li></ul> Spectinomycin sulphate tetrahydrate: <ul style="list-style-type: none"><li>• Intravenous LD<sub>50</sub> (Mouse): 1,022 mg/kg</li><li>• Oral LD<sub>50</sub> (Rat): &gt;5,000/kg/kg</li><li>• Intraperitoneal LD<sub>50</sub> (Mouse): 3,577 mg/kg</li></ul>
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<b>Sensitisation:</b>	May cause hypersensitivity reactions. Hypersensitivity reactions such as angioneurotic oedema, serum sickness and anaphylaxis have been reported from exposure to lincomycin hydrochloride. Some of these people were known to be sensitive to penicillin. Rare instances of erythema multiforme, some resembling Stevens-Johnson syndrome, have been associated with lincomycin hydrochloride.
<b>Skin Contact:</b>	Spectinomycin sulphate tetrahydrate: <ul style="list-style-type: none"> <li>• Non irritant (rabbit)</li> </ul>
<b>Eye Contact:</b>	Lincomycin hydrochloride: <ul style="list-style-type: none"> <li>• Mild irritant (rabbit)</li> </ul> Spectinomycin sulphate tetrahydrate: <ul style="list-style-type: none"> <li>• Mild irritant (rabbit)</li> </ul>

<b>Chronic / Long Term Effects</b>	
Repeated exposure to lincomycin hydrochloride may cause abdominal cramps, diarrhoea and colitis. This may begin several weeks after exposure has ceased.	
<b>Carcinogenicity:</b>	Ingredient is not listed as carcinogenic by IARC, NTP, or OSHA
<b>Genotoxicity:</b>	Negative
<b>Teratogenicity:</b>	No teratogenic effects seen in rats or dogs

<b>Section 12: Ecotoxicity Information</b>	
<b>HSNO Classifications</b>	
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.

<b>Ecotoxicity Effects</b>	
<b>Toxicity to Birds:</b>	Not applicable
<b>Acute Toxicity to Fish:</b>	Not applicable
<b>Toxicity to Algae:</b>	Not applicable
<b>Toxicity to Aquatic Invertebrates:</b>	Not applicable
<b>Toxicity to Soil Dwelling Organisms:</b>	Not applicable
<b>Acute Toxicity to Bees:</b>	Not applicable

<b>Environmental Fate</b>	
<b>Mobility:</b>	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.
<b>Persistence / Biodegradability:</b>	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.

<b>Bioaccumulative Potential:</b>	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.
<b>Abiotic Potential:</b>	Lincomycin will have some initial inhibitory effects on the most sensitive micro-organisms 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

<b>Product Disposal:</b>	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.
<b>Container Disposal:</b>	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.

### Section 14: Transport Information

#### Dangerous Goods Classification

<b>UN No.:</b>	Not applicable. This product is not a dangerous good.
<b>Class:</b>	Not applicable. This product is not a dangerous good.
<b>Packing Group:</b>	Not applicable. This product is not a dangerous good.
<b>Proper Shipping Name:</b>	Not applicable. This product is not a dangerous good.

### Section 15: Regulatory Information

<b>HSNO Approval No.:</b>	HSR002414
<b>HSNO Controls:</b>	See <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> for controls
<b>ACVM Registration No.:</b>	A002098
<b>ACVM Controls:</b>	See <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a> for registration conditions

### Section 16: Other Information

**Note:** This product is a veterinary medicine and must therefore be used in accordance with the container label directions. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the Government health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

<b>CONTACT POINT:</b>	<b>Zoetis New Zealand Limited:</b>	0800 963 847 (Business Hours)
	<b>National Poisons Centre:</b>	0800 POISON (0800 764 766)
	<b>Emergency Services:</b>	Dial 111

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. 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.

If clarification of further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

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