

SAFETY DATA SHEET



1. Identification

Product identifier	LINCO-SPECTIN® Premix Antibiotic for Swine	
Other means of identification		
Synonyms	Linco-Spectin® Premix 22 + 22	
Recommended use of the chemical and restrictions on use		
Recommended use	Veterinary antibiotic agent	
Restrictions on use	Not for human use	
Details of manufacturer or importer		
Manufacturer		
Company Name (AU)	Zoetis Australia Pty Ltd ABN 94 156 476 425 Level 6, 5 Rider Boulevard Rhodes NSW 2138 AUSTRALIA	
Tel	1800 814 883	
Fax	(02) 8876 0444	
Email	australia.animalhealth@zoetis.com	
Emergency Phone	1800 814 883 (all hours)	
Police and Fire Brigade	Dial 000	
If ineffective	Dial Poisons Information Centre (13 1126 from anywhere in Australia)	

2. Hazard(s) identification

Classification of the hazardous chemical

Physical hazards	Not classified.	
Health hazards	Sensitization, skin	Category 1
Environmental hazards	Not classified.	

Label elements, including precautionary statements

Hazard symbol(s)



Exclamation mark

Signal word

Warning

Hazard Statement(s)

May cause an allergic skin reaction.

Precautionary Statement(s)

Prevention

Avoid breathing dust. Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves.

Response

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Storage

Store away from incompatible materials.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards which do not result in classification

May form combustible dust concentrations in air.

Supplemental information

May cause eye irritation. May cause skin irritation. The most common adverse effects reported with clinical use were diarrhea, nausea, rash, and vomiting. Effects on blood and blood-forming organs have also occurred.

3. Composition/information on ingredients

Mixture

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients
Lincomycin Hydrochloride Monohydrate	7179-49-9	2.2
Spectinomycin Sulfate Tetrahydrate	64058-48-6	2.2

4. First-aid measures

Description of necessary first aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.
Eye contact	Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Personal protection for first-aid responders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.
Symptoms caused by exposure	Dusts may irritate the respiratory tract, skin and eyes. May cause an allergic skin reaction. Dermatitis. Rash.
Medical attention and special treatment	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂). Apply extinguishing media carefully to avoid creating airborne dust.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for fire fighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Hazchem Code	None.
General fire hazards	May form combustible dust concentrations in air.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Keep unnecessary personnel away. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.
For emergency responders	Wear appropriate protective equipment and clothing during clean-up. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Ventilate the contaminated area. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not breathe dust. Avoid contact with eyes, skin, and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Methods and materials for containment and cleaning up

Ensure adequate ventilation. Avoid the generation of dusts during clean-up. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Collect spill with an inert, non-combustible absorbent material and transfer to labeled container for disposal. Clean contaminated surface thoroughly. Prevent release to the environment.

Small Spills: Wipe up with a damp cloth and place in container for disposal. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

7. Handling and storage**Precautions for safe handling**

Provide adequate ventilation. Minimise dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. wear personal protective equipment. Observe good industrial hygiene practices. Wash thoroughly after handling. When using, do not eat, drink or smoke. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep containers tightly closed in a cool, well-ventilated place. < 30C/86F. Keep away from heat, sparks and open flame. Protect from sunlight. Store away from incompatible materials (see Section 10 of the SDS). Keep out of the reach of children.

8. Exposure controls and personal protection**Control parameters**

Follow standard monitoring procedures.

Occupational exposure limits**Zoetis****Components**

Components	Type	Value
Lincomycin Hydrochloride Monohydrate (CAS 7179-49-9)	TWA	100 µg/m ³
Spectinomycin Sulfate Tetrahydrate (CAS 64058-48-6)	TWA	2000 µg/m ³

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Provide adequate general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

Individual protection measures, for example personal protective equipment (PPE)**Eye/face protection**

Wear safety glasses with side shields (or goggles).

Skin protection**Hand protection**

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Respiratory protection should be provided in instances where exposure to dust, mists, aerosols or vapors are likely. Chemical respirator with organic vapour cartridge, full facepiece, dust and mist filter.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

Hygiene measures

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace

9. Physical and chemical properties

Appearance

Physical state	Solid.
Form	Powder.
Colour	Not available.
Odour	Not available.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit – upper (%)	Not available.

Vapour pressure Not available.

Vapour density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other physical and chemical parameters

Explosive properties Not explosive.

Oxidising properties Not oxidising.

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials. Keep away from heat, sparks and open flame. Avoid dispersion as a dust cloud. Dust may form explosive mixture with air. Fine particles (such as dust and mists) may fuel fires/explosions.

Incompatible materials Peroxides. Phenols. As a precautionary measure, keep away from strong oxidizers.

Hazardous decomposition products Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Thermal decomposition products may include oxides of carbon, nitrogen, and sulfur. May include hydrogen chloride.

11. Toxicological information

Information on possible routes of exposure

Inhalation Dust may irritate respiratory system. Prolonged inhalation may be harmful.

Skin contact Dust or powder may irritate the skin. May cause an allergic skin reaction.

Skin contact

Spectinomycin Sulfate Tetrahydrate

Species: Rabbit
Severity: No effect**Eye contact**

Lincomycin Hydrochloride Monohydrate

Dust may irritate the eyes.

Severity: Irritant

Spectinomycin Sulfate Tetrahydrate

Species: Rabbit
Severity: Minimal**Ingestion**

May be harmful if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms related to exposure

Dusts may irritate the respiratory tract, skin and eyes. May cause an allergic skin reaction. Dermatitis. Rash. The most common adverse effects reported with clinical use were diarrhea, nausea, rash, and vomiting.

Acute toxicity

May cause an allergic skin reaction.

Components**Species****Test results**

Lincomycin Hydrochloride Monohydrate (CAS 7179-49-9)

Acute**Intravenous**

LD50 Mouse 214 mg/kg

Oral

LD50 Rat > 4000 mg/kg

Other

LD50 Rat 342 mg/kg (Para-periosteal)

Subcutaneous

LD50 Rat 9778 mg/kg

Chronic**Oral**

NOAEL Dog 100 mg/kg/day, 6 months (Target organ(s): Immune system)

Subacute**Oral**

NOAEL Rat 300 mg/kg/day, 30 days (No effects at maximum dose)

Subcutaneous

NOAEL Rat 60 mg/kg/day, 30 days (Target organ(s): None identified)

Subchronic**Oral**

LOAEL Dog 400 mg/kg/day, 3 months (Target organ(s): None identified)

NOAEL Rat 300 mg/kg/day, 3 months (Target organ(s): None identified)

Spectinomycin Sulfate Tetrahydrate (CAS 64058-48-6)

Acute**Intravenous**

LD50 Mouse 1022 mg/kg

Oral

LD50 Rat > 5000 mg/kg

Other

LD50 Mouse 3577 mg/kg [Sub-tenon injection (eye)]

Components	Species	Test results
Subchronic		
Oral		
LOAEL	Rat	3000 mg/kg/day, 13 weeks (Target organ(s): None identified)
NOAEL	Dog	50 mg/kg/day, 90 days (Target organ(s): None identified)
	Rat	400 mg/kg/day, 13 weeks (Target organ(s): None identified)
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Corrosivity		
Spectinomycin Sulfate Tetrahydrate		Severity: No effect
Serious eye damage/irritation	Direct contact with eyes may cause temporary irritation.	
Eye contact		
Lincomycin Hydrochloride Monohydrate		Severity: Irritant
Spectinomycin Sulfate Tetrahydrate		Species: Rabbit Severity: Minimal
Respiratory or skin sensitisation		
Respiratory sensitisation	Not a respiratory sensitizer.	
Skin sensitisation	May cause an allergic skin reaction.	
Skin sensitisation		
Lincomycin Hydrochloride Monohydrate		Severity: Sensitiser
Spectinomycin Sulfate Tetrahydrate		Severity: Sensitiser
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Mutagenicity		
Lincomycin Hydrochloride Monohydrate		Bacterial Mutagenicity (Ames) Result: negative Species: Salmonella
Spectinomycin Sulfate Tetrahydrate		Bacterial Mutagenicity (Ames) Result: negative Species: Salmonella
Lincomycin Hydrochloride Monohydrate		Direct DNA Interaction Result: negative Species: Human lymphocytes
Spectinomycin Sulfate Tetrahydrate		In Vitro Chromosome Aberration Result: negative Species: Chinese Hamster Ovary (CHO) cells
		In Vitro Unscheduled DNA Synthesis Result: negative Species: Rat Hepatocyte
		In Vivo Micronucleus Result: negative Species: Mouse Bone Marrow
Lincomycin Hydrochloride Monohydrate		In Vivo Micronucleus Result: negative Species: Rat

Mutagenicity

Lincomycin Hydrochloride Monohydrate

Mammalian Cell Mutagenicity

Result: negative

Species: Mouse Lymphoma

Carcinogenicity

Due to partial or complete lack of data the classification is not possible.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects. This compound can cross the placenta in pregnant women. may be secreted in human breast milk.

Developmental effects

Lincomycin Hydrochloride Monohydrate

100 mg/kg Prenatal & Postnatal Development, Not

Teratogenic

Result: NOEL

Species: Rat

Organ: Oral

Spectinomycin Sulfate Tetrahydrate

1000 mg/kg/day Embryo / Fetal Development, (Maternal Toxicity)

Result: NOAEL

Species: Rat

Organ: Oral

2000 mg/kg/day Embryo / Fetal Development, (Fetotoxicity)

Result: NOAEL

Species: Rat

Organ: Oral

Lincomycin Hydrochloride Monohydrate

30 mg/kg/day Peri-/Postnatal Development, No effects at maximum dose

Result: NOAEL

Species: Rat

Organ: Subcutaneous

300 mg/kg/day Embryo/Fetal Development, Not Teratogenic

Result: NOAEL

Species: Rat

Organ: Subcutaneous

75 mg/kg/day Fertility and Embryonic Development, No effects at maximum dose

Result: NOAEL

Species: Rat

Organ: Subcutaneous

Reproductivity

Lincomycin Hydrochloride Monohydrate

100 mg/kg 2 Generation Reproductive Toxicity, Fetotoxicity

Result: LOAEL

Species: Rat

Organ: Oral

Spectinomycin Sulfate Tetrahydrate

2000 mg/kg/day Reproductive & Fertility, (Maternal Toxicity, Paternal toxicity, Fetotoxicity)

Result: NOAEL

Species: Rat

Organ: Oral

400 mg/kg/day Reproductive & Fertility, (Maternal toxicity, Paternal toxicity, Fetotoxicity)

Result: NOEL

Species: Rat

Organ: Oral

Specific target organ toxicity - single exposure

Not classified.

Specific target organ toxicity - repeated exposure

Not classified.

Aspiration hazard

Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. Avoid release to the environment.

Components	Species	Test results
Lincomycin Hydrochloride Monohydrate (CAS 7179-49-9)		
EC50	Anabaena flos-aquae (Cyanobacteria)	0.03 mg/l, 72 Hours
	Daphnia magna (Water Flea)	> 900 mg/l, 48 Hours
LC50	Lepomis macrochirus (Bluegill Sunfish)	> 980 mg/l, 96 Hours
	Salmo gairdneri (Trout)	> 980 mg/l, 96 Hours
Spectinomycin Sulfate Tetrahydrate (CAS 64058-48-6)		
EC50	Daphnia magna (Water Flea)	> 1000 mg/l, 48 Hours
	Selenastrum capricornutum (Green Alga)	1.18 mg/l, 72 Hours
LC50	Oncorhynchus mykiss (Rainbow Trout)	> 118 mg/l, 96 Hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

**Partition coefficient
n-octanol / water (log Kow)**

Spectinomycin Sulfate Tetrahydrate -2.44, (Log D, measured, pH 7.4)

Mobility in soil No data available for this product.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal methods Avoid release to the environment. Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. 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 minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater. Dispose of contents/container in accordance with local/regional/national/international regulations. Contract with a disposal operator licensed by the Law on Disposal and Cleaning.

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal

14. Transport information

ADG

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not applicable.

15. Regulatory information

Safety, health and environmental regulations

National regulations

This Safety Data Sheet was prepared in accordance with Australia Model Code of Practice for the preparation of Safety Data Sheets for Hazardous Chemicals (23/12/2011).

APVMA No. 38701

Poison Schedule (Product) - Schedule 4

This SDS replaces version: Issued 30 April 2015

Australia Medicines & Poisons Appendix A

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix B

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix C

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix D

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix E

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix F

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix G

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix H

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix I

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix J

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix K

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 2

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 3

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 4

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 5

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 6

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 7

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 8

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 9

Poisons schedule number not allocated.

High Volume Industrial Chemicals (HVIC)

Not listed.

Importation of Ozone Depleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)

Not listed.

National Pollutant Inventory (NPI) substance reporting list

Not listed.

Prohibited Carcinogenic Substances

Not regulated.

Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)

Not listed.

Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)

Not listed.

Restricted Carcinogenic Substances

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date

12-November-2016

Disclaimer

Zoetis Inc. believes that the information contained in this Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time. The information in the sheet was written based on the best knowledge and experience currently available.

Revision information

Product and Company Identification: Alternate Trade Names
Composition / Information on Ingredients: Ingredients
GHS: Classification