



## Tylan Soluble

Effective Date: 14 February 2017

### Section 1 – Identification of the substance and supplier

**Product Name:** Tylan Soluble  
**Manufacturer's Product Code:** AF1300  
**UN number:** 3077  
**Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Tylosin 10%)  
  
**Pack Size:** 100g  
**Recommended use:** An antibiotic powder for addition to drinking water of pigs and poultry

#### NEW ZEALAND COMPANY DETAILS:

**Elanco Animal Health**  
*(A Division of Eli Lilly & Company (NZ) Limited)*  
 Level 1, 123 Ormiston Road  
 Botany Junction, Auckland 2016  
  
 Telephone: 0800 426 633

#### NEW ZEALAND EMERGENCY PHONE:

**CHEMCALL:**  
 0800 CHEMCALL (0800 243 622)  
 24 hours  
**National Poisons Centre:**  
 0800 POISON (0800 764 766)  
 Fire Brigade, Transport Emergency  
 Phone→111

### Section 2 - Hazards Identification

Classified as a hazardous substance according to the criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.

Tylan Soluble is approved pursuant to the HSNO Act 1996, HSR002370. The EPA website [www.epa.govt.nz](http://www.epa.govt.nz) should be consulted for the full list of triggered controls and cited regulations.

**HSNO Classifications:**

- 6.4A Eye irritant
- 6.5A Respiratory allergen
- 6.5B Skin allergen
- 9.1A Aquatic ecotoxin

**Signal word:** WARNING

**Hazard Statements:** Causes eye irritation  
 May cause allergy or asthma symptoms or breathing difficulties if inhaled  
 May cause an allergic skin reaction  
 Very toxic to aquatic life

**Precautionary Statements:** Wear protective gloves, clothing, eye and face protection when handling  
 Wash hands and exposed skin thoroughly after handling  
 Contaminated work clothing should not be allowed out of the workplace  
 Wash contaminated clothing before reuse  
 Avoid breathing dust  
 In case of inadequate ventilation wear respiratory protection (dust mask)  
 Avoid release to the environment  
 Collect spillage  
 Read label before use  
 Keep out of reach of children

### Section 3 - Composition / Information on Ingredients

Chemical Name	CAS-No.	Concentration [%]
Tylosin tartrate	1405-54-5	95
Excipients not contributing to a hazard	NA	5

NA = Not applicable, Not assigned, or Not available.

#### Tylosin tartrate:

**Chemical Name:** Tylosin, (2R,3R)-2,3-dihydroxybutanedioate (salt)

**Alternate Chemical Name:** Tylosin Tartrate Concentrate; Tylosin Tartrate; Tylosin

### Section 4 - First Aid Measures

#### SYMPTOMS:

**If inhaled:** Allergic reactions to tylosin in a manufacturing setting have been reported. Allergy symptoms may include skin rash, watery eyes, shortness of breath, nasal congestion, coughing, and wheezing.

**If on skin:** May cause a skin rash.

**If in eyes:** May irritate eyes.

**TREATMENT:**

**If swallowed:** Do not induce vomiting. Call a physician or poison control center. Do not give anything by mouth to an unconscious person. Immediately transport to a medical care facility and see a physician.

**If inhaled:** Move individual to fresh air. Keep at rest in a position comfortable for breathing. Get medical attention if breathing difficulty occurs. If not breathing, provide artificial respiration assistance (mouth-to-mouth) and call a physician immediately.

**If on skin:** Remove contaminated clothing and clean before reuse. Wash all exposed areas of skin with plenty of soap and water. Get medical attention if irritation develops.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Section 5 - Fire Fighting Measures**

**Flash point** Not known

**Lower explosion limit** Not known

**Upper explosion limit** Not known

**Suitable extinguishing media:** Use water, carbon dioxide, dry chemical

**Unsuitable extinguishing media:** None known

**Unusual Fire and Explosion Hazards:** As a finely divided material, may form dust mixtures in air which could explode if subjected to an ignition source. Minimum Ignition Temperature of Dust Layer: 380 C.

**Fire fighting precautions:** May emit toxic fumes when exposed to heat or fire. Hazardous decomposition products formed under fire conditions.

**Hazchem code:** 2Z

**Section 6 - Accidental Release Measures**

**Protective clothing and equipment:** Wear protective equipment, including eye protection, to avoid exposure (see Section 8 for specific handling precautions).

**Environmental precautions:** Prevent further migration into the environment. Do not allow material to enter waterways.

<b>Procedure:</b>	Vacuum material with appropriate dust collection filter in place. 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.
<b>Emergency response assistance:</b>	For specialist advice in an emergency call 0800 CHEMCALL (0800 243 622) and Elanco Animal Health for assistance

### **Section 7 - Handling and Storage**

<b>Storage instructions:</b>	Keep out of reach of children. Store in a cool dry place.
<b>Handling precautions:</b>	Wash hands and exposed skin thoroughly after handling. Do not breathe dust.
<b>Emergency response plan required:</b>	100kg
<b>Emergency containment required:</b>	N/A
<b>Signage required:</b>	100kg
<b>Approved Handler:</b>	Not required
<b>Packaging requirements:</b>	Packing group III

### **Section 8 - Exposure Controls / Personal Protection**

<b>Exposure limits or guidelines:</b>	Tylosin tartrate: LEG <100 µg/m <sup>3</sup> TWA (12h)
<b>Engineering measures:</b>	In a manufacturing setting, wear chemical-resistant gloves and body covering to minimize skin contact. If handled in a ventilated enclosure, as in a laboratory setting, respirator and goggles or face shield may not be required. Safety glasses are always required. Laboratory fume hood or local exhaust ventilation.
<b>Personal protective equipment:</b>	In a manufacturing setting, use protective clothing, impervious gloves, and approved respirator. Chemical goggles and/or face shield. Under normal use and handling conditions, wear goggles to protect eyes and wear impermeable gloves and protective equipment to avoid direct contact with skin. Wash thoroughly with soap and water after handling.

**Section 9 - Physical and Chemical Properties**

<b>Appearance:</b>	Yellow powder
<b>Physical state:</b>	Solid
<b>Odour:</b>	Odourless
<b>pH:</b>	4.5 – 7.2 (50% aqueous solution)
<b>Melting point:</b>	240°C
<b>Solubility:</b>	Soluble
<b>Specific Gravity:</b>	Not applicable
<b>Flammability:</b>	Not flammable

**Section 10 - Stability and Reactivity**

<b>Stability:</b>	Stable at normal temperatures and pressures
<b>Conditions to avoid:</b>	None known
<b>Incompatible materials:</b>	May react with strong oxidizing agents (e.g., peroxides, permanganates, nitric acid, etc.).
<b>Hazardous decomposition products:</b>	May emit toxic fumes when heated to decomposition
<b>Hazardous reactions</b>	Hazardous polymerisation does not occur

**Section 11 - Toxicological Information**

No data available for mixture. Data for ingredients or related materials are presented.

<b>Acute oral toxicity</b>	Tylosin tartrate:	LD <sub>50</sub> (Rat) >6200 mg/kg
<b>Acute inhalation toxicity</b>	Tylosin tartrate:	LC <sub>50</sub> (Rat) >600 mg/m <sup>3</sup> (1h)
<b>Acute dermal toxicity</b>	Tylosin tartrate:	LD <sub>50</sub> (Rabbit) >2000 mg/kg
<b>Skin irritation</b>	Tylosin tartrate:	Rabbit, slight irritation
<b>Eye irritation</b>	Tylosin tartrate:	Rabbit, irritant, cleared within 7 days
<b>Sensitisation</b>	Tylosin tartrate:	Guinea pig, causes sensitisation (as free base) Allergic reactions in a manufacturing setting have been reported. Allergy symptoms may include skin rash, watery eyes, shortness of breath, nasal congestion, coughing, and wheezing.
<b>Repeated dose toxicity</b>	Tylosin base:	No effects identified in animal studies

<b>Reproductive toxicity</b>	Tylosin tartrate:	Animal testing did not show any effects on fertility. Animal testing did not show any effects on foetal development. (as free base)
<b>Carcinogenicity</b>	Tylosin tartrate:	Animal testing did not show any carcinogenic effects. (as free base)
<b>Mutagenicity</b>	Tylosin tartrate:	Mutagenic in one mammalian test system. Not mutagenic in bacterial cell tests and other mammalian cell tests. Unlikely to pose a genotoxic risk to man (as free base).

## Section 12 - Ecological Information

No data available for mixture. Data for ingredients or related materials are presented.

<b>Toxicity to fish</b>	Tylosin tartrate :	LC <sub>50</sub> / 96h / Oncorhynchus mykiss (rainbow trout) : >300 mg/L (as free base) LC <sub>50</sub> / 96h / Lepomis macrochirus (Bluegill sunfish): >300 mg/L (as free base)
<b>Toxicity to algae</b>	Tylosin tartrate (as free base):	EC <sub>50</sub> /72h (average specific growth rate)/ Pseudokirchneriella subcapitata: 0.22 mg/L
<b>Toxicity to daphnia</b>	Tylosin tartrate (as free base):	EC <sub>50</sub> / 48 h / Daphnia magna : >300 mg/L
<b>Toxicity to earthworms</b>	Tylosin tartrate:	LC <sub>50</sub> / 14d / Earthworm : >102.6 mg/kg
<b>Toxicity to birds</b>	Tylosin tartrate:	LC <sub>50</sub> / 14d oral / Bobwhite : >2000 mg/kg (tylosin base) LC <sub>50</sub> / 5d dietary / Bobwhite : >5000 ppm (tylosin base) LC <sub>50</sub> / 5d dietary / Mallard : >5000 ppm (tylosin base)

<b>Any other relevant information available</b>	Tylosin base:	Seedling median effective concentration (growth): 43 mg/kg (tomato); 53 mg/kg (soybean); 140 mg/kg (oat)
		Water Solubility (g/L): 5
		Koc: 200 (sandy loam, pH 4.6); 1652 (silt loam, pH 5.7); 2233 (sandy loam; pH 7.6)
		UV-visible light absorption (nm): 282
		Soil degradation half-life (100 ppm): 62 days (tylosin factor A); 37 days (tylosin factor D)
		Soil degradation half-life (1 mg/kg; 4 soils): 50.3 to 105 days
		Leaching in soil column: none
<b>Lilly Aquatic Exposure Guideline</b>	Tylosin tartrate:	Drinking Water: 36 µg/l
		Chronic Exposure of Aquatic Organisms: 99 µg/l
		Acute Exposure of Aquatic Organisms: 220 µg/l

### Section 13 - Disposal Considerations

Preferably dispose of product by use. Otherwise dispose of product as part of an approved chemical disposal program. Burn empty packaging if conditions such as wind direction permit. Otherwise dispose of packaging at an approved landfill facility.

### Section 14 - Transport Information

<b>Land Transport</b>	Classified as dangerous goods for transport under NZ Standard 5433:2007 Transport of Dangerous Goods on Land.
<b>Air Transport</b>	Classified as dangerous goods for transport under International Civil Aviation Organisation and International Air Transport Association regulations
<b>Sea Transport</b>	Classified as dangerous goods for transport under International Maritime Organisation regulations
<b>UN Number</b>	3077
<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S. (Tylosin 10%)
<b>DG Class</b>	9
<b>Subsidiary Risk</b>	-
<b>Packing Group</b>	III
<b>HAZCHEM Code</b>	2Z
<b>Marine Pollutant</b>	Yes

The maximum quantity of this substance allowed for carriage on public transport is 0.5kg.

### **Section 15 - Regulatory Information**

Tylan Soluble is approved pursuant to the ACVM Act 1997 (A0086)  
See [www.foodsafety.govt.nz](http://www.foodsafety.govt.nz) for registration conditions.

A Safety Data Sheet must be provided whenever 3kg of Tylan Soluble is sold or supplied.

### **Section 16 – Other Information**

This SDS is effective as of 14 February 2017.

**Sections updated or revised:**                      Formatting of entire document.

Due for revision within 5 years.

### **Further information**

As of the date of issuance, we are providing available information relevant to the handling of this material in the workplace. All information contained herein is offered with the good faith belief that it is accurate. THIS MATERIAL SAFETY DATA SHEET SHALL NOT BE DEEMED TO CREATE ANY WARRANTY OF ANY KIND (INCLUDING WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE). In the event of an adverse incident associated with this material, this safety data sheet is not intended to be a substitute for consultation with appropriately trained personnel. Nor is this safety data sheet intended to be a substitute for product literature which may accompany the finished product.

For additional information contact:  
Elanco Animal Health  
0800 426 633