

## SAFETY DATA SHEETS

**This SDS packet was issued with item:**

078705162

**The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).**

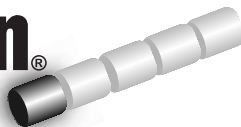
078799239

**COMPONENT<sup>®</sup>**  
BRAND IMPLANTS

**VetLife<sup>®</sup>**

# E-H WITH Tylan<sup>®</sup>

HEIFER IMPLANTS



testosterone propionate USP 200 mg and  
estradiol benzoate 20 mg with 29 mg tylosin  
tartrate as a local antibacterial

## 20 dose CARTRIDGE BELT\*

For use with the COMPONENT One Gun<sup>®\*\*</sup>

**For Use in Animals Only**

Each CARTRIDGE BELT holds 20 doses of COMPONENT<sup>®</sup> E-H Implants. Each dose of 9 pellets consists of 8 pellets containing a total of 200 mg testosterone propionate USP and 20 mg estradiol benzoate plus 1 pellet containing 29 mg tylosin tartrate as a local antibacterial. COMPONENT<sup>®</sup> E-H Implants are recommended for use in heifers weighing 400 lbs or more for INCREASED RATE OF WEIGHT GAIN AND IMPROVED FEED EFFICIENCY.

Do not use in veal calves. Effectiveness and animal safety in veal calves have not been established.

**DOSAGE:** Administer 1 implant per animal according to the following instructions.

### GENERAL INSTRUCTIONS:

Study the instructions which should be followed carefully at all times, avoiding short cuts. Skin infection can be avoided by properly preparing implant site and implanter. During fly season use fly repellent on implant site. One designated team member should always do the implanting. Cleanliness of hands and instruments is important at all times.

### WARNING

**Not to be used in animals intended for subsequent breeding, or in dairy animals.** Implant one dose — 9 pellets (entire contents of one cartridge cell) — in the ear subcutaneously. Any other site of implantation is in violation of Federal Law. **DO NOT** attempt to salvage implantation site for animal feed or human food.

**A withdrawal period has not been established for this product in pre-ruminating calves. Do not use in calves to be processed for veal.**

**RESTRICTED DRUG — USE ONLY AS DIRECTED (CALIFORNIA) —  
FOR USE IN ANIMALS ONLY — NOT FOR HUMAN USE —  
KEEP OUT OF REACH OF CHILDREN**

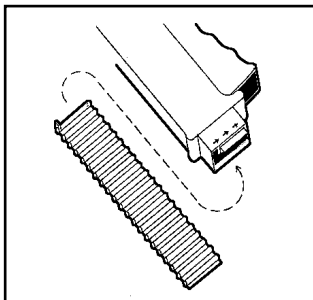
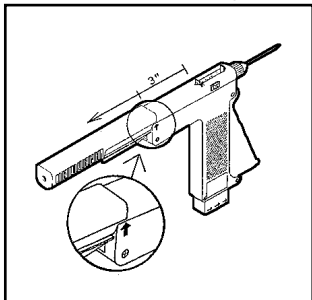
### CAUTION:

For use in heifers only. Bulling, vaginal and rectal prolapse, udder development, ventral edema and elevated tail-heads have occasionally been reported in animals implanted with testosterone propionate and estradiol benzoate.

### IMPLANTING INSTRUCTIONS:

#### Loading the Implanter

Load the implanter following the instructions supplied with each implanter.



### Restrain the Animal

Speed of implantation as well as safety of handlers is best achieved by restraining animal in a squeeze chute using head restraint. When implanting horned cattle, better control is obtained with additional use of nose tongs.

### Prepare the Implant Site

Scrub the back side of the ear (implant site) with a piece of clean absorbent cotton which has been soaked with a germicidal solution. Follow manufacturer's directions on germicide for correct strength and preparation of solution. Avoid getting disinfectant in animal's eyes.

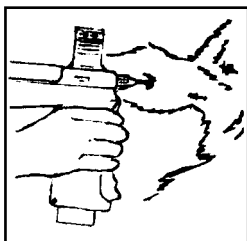
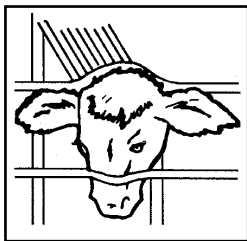
### Where to Implant

The full contents of one cartridge cell should be implanted beneath the skin on the back side of the middle one-third of the ear as illustrated in the drawing. The implant must not be closer to the head than the edge of the auricular cartilage ring farthest from the head. The location for insertion of the needle is a point toward the tip of the ear and at least a needle length away from the intended deposition site.

Avoid injuring the large arteries, veins and cartilage of the ear.

### Insert the Needle

With one hand firmly grasp the ear. With the other hand insert needle point through the skin and ease forward on a lateral plane until the entire length of the needle is under the skin.



### Implant the Pellets

After inserting the needle fully in the correct implant position squeeze the trigger fully. As the needle is withdrawn from the ear, the controlled-pressure plunger action properly deposits the implant in the needle track. This procedure should prevent breakage or crushing of pellets if otherwise forced into contact with tough fibrous-tissue underlying the skin. The length and total contact area of a single dose are designed to permit absorption of the hormones after implantation to stimulate good weight gain. Broken or crushed pellets may interfere with rates of gain and may lead to undesirable side effects such as noted in the CAUTION.

### Clean the Needle

Clean the implanter needle with alcohol or a properly diluted germicidal solution prior to implanting the next animal.

### Storage Conditions

Store at controlled room temperature 15° to 30°C (59° to 86° F)

DO NOT refrigerate – avoid excessive heat and humidity.

NADA 135-906, Approved by FDA

### Manufactured by a non-sterilizing process.

\*U.S. Patent No. 4,531,938

\*\*U.S. Patent Nos. 4,762,515 & 5,522,797 – Ivy Animal Health, Inc.

COMPONENT E-H with Tylan is covered by U.S. Patent No. 5,874,098

COMPONENT and COMPONENT One Gun are registered trademarks of Ivy Animal Health, Inc.

Tylan is a registered trademark of Eli Lilly and Company.

Manufactured for **VetLife** by Ivy Laboratories.

Overland Park, KS 66214, USA

VetLife and Ivy Laboratories are divisions of Ivy Animal Health, Inc.



# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>Component E-H Implant with Tylan and Component H Implant with Tylan</b>
<b>Other means of identification</b>	
<b>Item Code</b>	AH0338
<b>Synonyms</b>	Component E-H Implant with Tylan * Component H Implant with Tylan
<b>Recommended use</b>	Veterinary Pharmaceutical
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Manufacturer</b>	
<b>Company Name</b>	Elanco Animal Health 2500 Innovation Way Greenfield, IN 46140 US
<b>Phone:</b>	1-877-Elanco1 (1-877-352-6261)
<b>Email:</b>	<a href="mailto:lilly_msds@lilly.com">lilly_msds@lilly.com</a>
<b>Emergency Telephone Numbers:</b>	Elanco Product Technical Support / Human or Animal Exposure Reporting: 1-888-545-5973 Transportation Emergency Telephone: CHEMTREC: 1-800-424-9300 (Outside U.S. 1-703-527-3887)

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Acute toxicity, oral	Category 4
	Serious eye damage/eye irritation	Category 2B
	Sensitization, respiratory	Category 1
	Sensitization, skin	Category 1
	Carcinogenicity	Category 1A
	Reproductive toxicity	Category 1A
	Reproductive toxicity	Effects on or via lactation
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Danger
<b>Hazard statement</b>	
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H320	Causes eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H362	May cause harm to breast-fed children.
<b>Precautionary statement</b>	
<b>Prevention</b>	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P263	Avoid contact during pregnancy/while nursing.

P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P285 In case of inadequate ventilation wear respiratory protection.

#### Response

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P330 Rinse mouth.  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.  
P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337 + P313 If eye irritation persists: Get medical advice/attention.  
P363 Wash contaminated clothing before reuse.  
P308 + P313 IF exposed or concerned: Get medical advice/attention.

#### Storage

P405 Store locked up.

#### Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Testosterone Propionate		57-85-2	65.79
Tylosin Tartrate	Tylosin, (2R,3R)-2,3-dihydroxybutanedioate (salt) LSN 029510	1405-54-5	9.54
Estradiol Benzoate		50-50-0	6.58
Other components below reportable levels			18.09

**Composition comments** This product consists of Testosterone Propionate and Estradiol (Component E-H or Component H), and Tylosin Tartrate, packaged independent of one another and encased in a plastic cartridge belt that poses no exposure risk unless the belt is damaged.

### 4. First-aid measures

**Inhalation** Move to fresh air. Oxygen or artificial respiration if needed. Get medical attention immediately.

**Skin contact** Immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention immediately.

**Eye contact** In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation develops and persists.

**Ingestion** Call a physician or poison control center immediately. If conscious, give the victim plenty of water to drink. Never give anything by mouth to a victim who is unconscious or is having convulsions.

**Most important symptoms/effects, acute and delayed**

May cause allergic skin reaction. May cause allergic respiratory reaction. Causes eye irritation. May cause cancer. May cause reproductive effects.

Intact implants are not considered hazardous under normal handling procedures. Caution should be used to avoid contact with the contents which contain testosterone propionate and estradiol. Prolonged exposure to testosterone propionate may affect the reproductive system and secondary sexual characteristics. High doses may also cause altered liver function with jaundice, fluid retention, weight gain, increased cholesterol levels, and increased number of red blood cells.

Increased breast size in boys and pseudoprecocious puberty in girls have been observed in children born to women occupationally exposed to estrogen. In men, overexposure may lead to gynecomastia (breast tenderness, breast nodules or enlarged breasts). In women, overexposure may cause menstrual irregularities (breakthrough bleeding, change in menstrual flow, spotting, amenorrhea) and breast changes (tenderness, enlargement, and secretion). Other effects of exposure to estradiol may include headache, nausea, vomiting, abnormal blood clotting, and increased incidence of cancer. An accelerated skeletal maturation, strong pigmentation of the sexual organs and a feminizing syndrome in boys has also been noted in children of parents who work in estrogen production.

**Indication of immediate medical attention and special treatment needed**

The estradiol may aggravate pre-existing estrogen-dependent neoplasias including malignancies of the female reproductive organs and breast, thromboembolic diseases, impaired liver or kidney function, and pregnancy.

**General information**

IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

## 5. Fire-fighting measures

**Suitable extinguishing media**

Water. Carbon dioxide (CO<sub>2</sub>). Dry chemical.

**Unsuitable extinguishing media**

None known.

**Specific hazards arising from the chemical**

Hazardous decomposition products formed under fire conditions.

**Special protective equipment and precautions for firefighters**

Wear self-contained breathing apparatus and protective clothing.

**Fire fighting equipment/instructions**

Use water spray to cool unopened containers.

**Specific methods**

Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**

No unusual fire or explosion hazards noted.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust and contact with skin and eyes. See Section 8 of the SDS for Personal Protective Equipment.

**Methods and materials for containment and cleaning up**

If pellets remain intact, scoop or scrape up material into containers for disposal. If pellets are broken, contain dry material by lightly misting with water, followed by vacuuming. 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/wet material and remove by mopping or wet wiping.

Large spills due to traffic accidents, etc., should be reported immediately to CHEMTREC and Elanco Animal Health for assistance.

**Environmental precautions**

Avoid discharge into drains, water courses or onto the ground. Prevent spilled material from flowing onto adjacent land or into streams, ponds, or lakes.

## 7. Handling and storage

**Precautions for safe handling**

NOT INTENDED FOR HUMAN USE.

Do not handle until all safety precautions have been read and understood. Pregnant or breastfeeding women must not handle this product. Wear appropriate personal protective equipment. Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling.

**Conditions for safe storage, including any incompatibilities**

Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

## 8. Exposure controls/personal protection

**Occupational exposure limits**

No exposure limits noted for ingredient(s).

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Exposure guidelines</b>	<p>Lilly Exposure Guideline (LEG): 12 hour TWA &lt;100 ug/m3 (Tylosin Tartrate)</p> <p>Lilly Exposure Guideline (LEG): 12 hour TWA 0.8 ug/m3 (Testosterone)</p> <p>Lilly Exposure Guideline (LEG): 8 hour TWA 0.9 ug/m3 (Testosterone)</p> <p>Lilly Exposure Guideline (LEG): 12 hour TWA 0.025 ug/m3 (Estradiol)</p> <p>Lilly Exposure Guideline (LEG): 8 hour TWA 0.04 ug/m3 (Estradiol)</p> <p>Lilly Exposure Guideline (LEG): 30 min Excursion Limit 0.075 ug/m3 (Estradiol)</p>
<b>Appropriate engineering controls</b>	Open handling is not recommended. Use appropriate control measures such as fume hood, ventilated enclosure, isolator (eg. glovebag, glovebox), or closed material transfer systems.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin protection</b>	
<b>Hand protection</b>	Chemical resistant gloves.
<b>Other</b>	Chemical-resistant gloves and impermeable body covering to minimize skin contact.
<b>Respiratory protection</b>	Select appropriate respirator for physical characteristics of material. Select respirator with appropriate protection factor.
<b>Thermal hazards</b>	Not available.
<b>General hygiene considerations</b>	<p>The intact implant is not considered hazardous under normal handling procedures.</p> <p>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.</p> <p>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.</p>

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Solid.
<b>Form</b>	Solid. Cylindrical pellets packaged as an implant.
<b>Color</b>	Blue (Tylosin Tartrate)

	White (Testosterone Propionate and Estradiol Benzoate)
<b>Odor</b>	Odorless

<b>Odor threshold</b>	No data available
-----------------------	-------------------

<b>pH</b>	No data available.
-----------	--------------------

<b>Melting point/freezing point</b>	No data available.
-------------------------------------	--------------------

<b>Initial boiling point and boiling range</b>	No data available.
--	--------------------

<b>Flash point</b>	No data available.
--------------------	--------------------

<b>Evaporation rate</b>	No data available.
-------------------------	--------------------

<b>Flammability (solid, gas)</b>	No test data available.
----------------------------------	-------------------------

### Upper/lower flammability or explosive limits

<b>Flammability limit - lower (%)</b>	No data available.
---------------------------------------	--------------------

<b>Flammability limit - upper (%)</b>	No data available.
---------------------------------------	--------------------

<b>Explosive limit - lower (%)</b>	No data available.
------------------------------------	--------------------

<b>Explosive limit - upper (%)</b>	No data available.
------------------------------------	--------------------

<b>Vapor pressure</b>	No data available.
-----------------------	--------------------

<b>Vapor density</b>	No data available.
----------------------	--------------------

<b>Relative density</b>	No data available.
-------------------------	--------------------

<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	No data available.
<b>Partition coefficient (n-octanol/water)</b>	No data available.
<b>Auto-ignition temperature</b>	No data available.
<b>Decomposition temperature</b>	No data available.
<b>Viscosity</b>	No data available.
<b>Other information</b>	
<b>Density</b>	No data available.
<b>Dust explosion properties</b>	
<b>Minimum ignition energy (MIE) - dust cloud</b>	< 5 mJ (estradiol)
<b>Explosive properties</b>	Not explosive
<b>Oxidizing properties</b>	No oxidizing properties.
<b>Potential for dust explosion</b>	No data available.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Hazardous decomposition products formed under fire conditions.

## 11. Toxicological information

### Information on toxicological effects

<b>Acute toxicity</b>	Harmful if swallowed.
-----------------------	-----------------------

Components	Species	Test Results
Testosterone Propionate (CAS 57-85-2)		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Mouse	1350 mg/kg
	Rat	1000 mg/kg
Tylosin Tartrate (CAS 1405-54-5)		
<b><u>Acute</u></b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Inhalation</b>		
LC50	Rat	> 600 mg/m3, 1 h
<b>Oral</b>		
LD50	Rat	> 6200 mg/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	This information is not available.
<b>Serious eye damage/eye irritation</b>	Causes eye irritation. (Tylosin Tartrate) (cleared within 7 days)
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<b>Skin sensitization</b>	May cause an allergic skin reaction.



<b>Germ cell mutagenicity</b>	Negative in bacterial cells. Induced micronuclei but not chromosomal aberrations, aneuploidy, or sister chromatid exchanges in in-vitro human cell assays. Induced aneuploidy and unscheduled DNA synthesis but did not induce DNA strand breaks or sister chromatid exchanges in in-vitro rodent cell assays. Did not induce chromosomal aberrations in bone marrow cells of mice treated in-vivo. (Estradiol)
	Results in genetic toxicity assays (in vitro): Negative (Testosterone)
	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. (Tylosin Tartrate, as free base) Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	May cause cancer. IARC Group 1 (sufficient evidence of carcinogenicity in humans). Estrogen-only menopausal therapy is carcinogenic to humans (Group 1) (Estradiol Benzoate)
	IARC Group 2A (limited evidence of carcinogenicity in humans). Androgenic (Anabolic) steroids are probably carcinogenic to humans (Group 2A) (Testosterone Propionate)
	Animal testing did not show any carcinogenic effects. (Tylosin Tartrate, as free base)

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Testosterone Propionate (CAS 57-85-2) 2A Probably carcinogenic to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### US. National Toxicology Program (NTP) Report on Carcinogens

Estradiol Benzoate (CAS 50-50-0) Known To Be Human Carcinogen.

<b>Reproductive toxicity</b>	May cause harm to breastfed babies. May damage fertility or the unborn child.
<b>Specific target organ toxicity - single exposure</b>	Due to partial or complete lack of data the classification is not possible.
<b>Specific target organ toxicity - repeated exposure</b>	Due to partial or complete lack of data the classification is not possible.
<b>Aspiration hazard</b>	No aspiration toxicity classification

## 12. Ecological information

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

Components		Species	Test Results
Estradiol Benzoate (CAS 50-50-0)			
Aquatic			
Fish	LC50	Medaka, high-eyes (Oryzias latipes)	460 µg/l, 72 h (Estradiol)
		Rainbow trout,donaldson trout (Oncorhynchus mykiss)	> 0.5 mg/l, 48 h (Estradiol)
Tylosin Tartrate (CAS 1405-54-5)			
Acute	EC50	Oats (Seedling)	140 mg/kg (Growth, as free base)
		Soybean (Seedling)	53 mg/kg (Growth, as free base)
		Tomato (Seedling)	43 mg/kg (Growth, as free base)
	LC50	Duck (Mallard duck)	> 5000 mg/kg, 5 days (dietary, as free base)
		Quail (Bobwhite quail)	> 5000 mg/kg, 5 days (dietary, as free base)
Other	EC50	Pseudokirchnerella subcapitata	0.22 mg/l (average specific growth rate) (as free base)
Chronic			
Acute	LC50	Earthworms (Eisenia fetida)	> 102.6 mg/kg, 14 days
		Quail (Bobwhite quail)	> 2000 mg/kg, 14 days
Aquatic			
Crustacea	EC50	Daphnia magna	> 300 mg/l (as free base)

Components		Species	Test Results
Fish	LC50	Bluegill ( <i>Lepomis macrochirus</i> )	> 300 mg/l (as free base)
		Rainbow Trout	> 300 mg/l (as free base)

\* Estimates for product may be based on additional component data not shown.

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

**Bioaccumulative potential** The product contains potentially bioaccumulating substances.

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

Estradiol Benzoate	4.01
Tylosin Tartrate	17, (pH 7)
	17, (pH 9)
	5, (pH 5)

**Mobility in soil** 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

**Adsorption**

**Soil/sediment sorption - log Koc**

Tylosin Tartrate	1652 Silt Loom (pH 5.7)
	200 Sandy Loom (pH 4.6)
	2233 Sandy Loom (pH 7.6)

**Other adverse effects** Not available.

**Ecotoxicological Properties**

**Drinking Water**

Components	Test Results
Estradiol Benzoate	0.00022 µg/l, (Lilly Aquatic Exposure Guideline)
Testosterone Propionate	0.004 µg/l, (Lilly Aquatic Exposure Guideline)
Tylosin Tartrate	36 µg/l, (Lilly Aquatic Exposure Guideline)

**Chronic Exposure of Aquatic Organisms**

Components	Test Results
Estradiol Benzoate	0.0009 µg/l, (Lilly Aquatic Exposure Guideline)
Testosterone Propionate	0.0003 µg/l, (Lilly Aquatic Exposure Guideline)
Tylosin Tartrate	99 µg/l, (Lilly Aquatic Exposure Guideline)

**Acute Exposure of Aquatic Organisms**

Components	Test Results
Estradiol Benzoate	0.009 µg/l, (Lilly Aquatic Exposure Guideline)
Testosterone Propionate	0.01 µg/l, (Lilly Aquatic Exposure Guideline)
Tylosin Tartrate	220 µg/l, (Lilly Aquatic Exposure Guideline)

### 13. Disposal considerations

**Disposal instructions** Dispose of contents/container in accordance with local/regional/national/international regulations. Do not allow this material to drain into sewers/water supplies.

**Waste codes** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

### 14. Transport information

**General information** Effective January 1, 2015 by Special Provision, UN3077 and UN3082 when packaged in inner packages of 5L / 5 KG or less are not subject to the dangerous goods regulations.

**DOT**

Not regulated as dangerous goods.

**IATA**

<b>UN number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s. (Tylosin Tartrate)
<b>Transport hazard class(es)</b>	
<b>Class</b>	9
<b>Subsidiary risk</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	Yes

<b>ERG Code</b>	9L
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Other information</b>	
<b>Passenger and cargo aircraft</b>	Allowed.
<b>Cargo aircraft only</b>	Allowed.

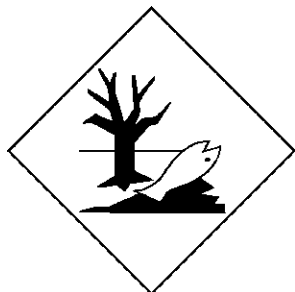
#### IMDG

<b>UN number</b>	UN3077
<b>UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Tylosin Tartrate)
<b>Transport hazard class(es)</b>	
<b>Class</b>	9
<b>Subsidiary risk</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>EmS</b>	F-A, S-F
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.

#### IATA; IMDG



#### Marine pollutant



## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
CERCLA/SARA Hazardous Substances - Not applicable.

One or more components are not listed on TSCA.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
 Delayed Hazard - Yes  
 Fire Hazard - No  
 Pressure Hazard - No  
 Reactivity Hazard - No

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations**

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

**US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. Massachusetts RTK - Substance List**

Testosterone Propionate (CAS 57-85-2)

**US. New Jersey Worker and Community Right-to-Know Act**

Not listed.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Not listed.

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

**US - California Proposition 65 - CRT: Listed date/Developmental toxin**

Estradiol Benzoate (CAS 50-50-0) Listed: April 1, 1990

**US - California Proposition 65 - CRT: Listed date/Female reproductive toxin**

Estradiol Benzoate (CAS 50-50-0) Listed: April 1, 1990

Testosterone Propionate (CAS 57-85-2) Listed: April 1, 1990

**US - California Proposition 65 - CRT: Listed date/Male reproductive toxin**

Estradiol Benzoate (CAS 50-50-0) Listed: April 1, 1990

Testosterone Propionate (CAS 57-85-2) Listed: April 1, 1990

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	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, including date of preparation or last revision**

**Issue date** 03-18-2015  
**Revision date** 09-11-2015  
**Version #** 02  
**Lilly Lab Code** Health: 2  
 Fire: 1  
 Reactivity: 0  
 Special 1: C  
 Special 2: R  
 Special 3: P  
 Special 4: A

**Disclaimer**

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 MERCHANT ABILITY 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  
0011+1-877-352-6261  
0011+1-800-428-4441

**Revision Information**

Product and Company Identification: Alternate Trade Names  
Physical & Chemical Properties: Multiple Properties  
GHS: Classification