# **SAFETY DATA SHEETS**

# This SDS packet was issued with item:

078705196

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

078394269 078799288

# Elanco

# SAFETY DATA SHEET

### 1. Identification

Product identifier Component TE-S, TE-G, TE-IS Implants, or Compudose G (TE-G)

Other means of identification

Item Code AH0367, AH0864, AH0803, AH0359, AH0804

Synonyms Component TE-S Implant \* Component TE-G Implant \* Component TE-IS Implant \* Component T

(TE-G)

Recommended use Veterinary Pharmaceutical

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information
Company Name Elanco Animal Health

2500 Innovation Way Greenfield, IN 46140

US

**Phone:** 1-877-Elanco1 (1-877-352-6261)

**Emergency Telephone:** Elanco Product Technical Support / Human or Animal Exposure Reporting:

1-888-545-5973

Email: elanco\_sds@elanco.com

Transportation Emergency CHEMTREC: 1-800-424-9300
(Outside U.S. 1-703-527-3887)

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Carcinogenicity Category 1A

Reproductive toxicity Category 1A

Reproductive toxicity Effects on or via lactation

OSHA defined hazards Not classified.

Label elements



Signal word Danger

**Hazard statement** 

H350 May cause cancer.

H360 May damage fertility or the unborn child. H362 May cause harm to breast-fed children.

**Precautionary statement** 

Prevention

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

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	%
Trenbolone Acetate		10161-34-9	61.92
Estradiol		50-28-2	12.38
Other components below reportable levels			25.8

**Composition comments** 

This product consists of 2 to 7 Trenbolone Acetate and Estradiol (TE-S) pellets packaged as a single implant, with 20 implants encased in a single plastic cartridge belt that poses no exposure risk unless the belt is damaged.

Remaining components of this product are non-hazardous and/or are present at concentrations below reportable levels.

### 4. First-aid measures

Inhalation Move to fresh air. Oxygen or artificial respiration if needed. Get medical attention immediately. Immediately flush skin with plenty of water. Get medical attention immediately. Remove Skin contact contaminated clothing and shoes.

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

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

Most important May cause cancer. May cause reproductive effects.

symptoms/effects, acute and delayed

Indication of immediate medical attention and special

treatment needed **General information**  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.

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). 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 Unsuitable extinguishing

Specific hazards arising from

Water. Carbon dioxide (CO2). Dry chemical.

None known.

media

Hazardous decomposition products formed under fire conditions.

the chemical Special protective equipment

Wear self-contained breathing apparatus and protective clothing.

and precautions for firefighters Fire fighting

Use water spray to cool unopened containers.

equipment/instructions Specific methods

General fire hazards

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

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. See Section 8 of the SDS for Personal Protective Equipment. Avoid inhalation of dust and contact with skin and eyes.

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. If vacuum is not available, lightly mist/wet material and remove by mopping or wet wiping. Be aware of potential for dust explosion when using electrical equipment.

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

**Environmental precautions** 

Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or

onto the ground.

# 7. Handling and storage

Precautions for safe handling

NOT INTENDED FOR HUMAN USE. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only with adequate ventilation. Avoid contact with eyes, skin, and clothing. Should be handled in closed systems, if possible. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

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

# 8. Exposure controls/personal protection

#### Occupational exposure limits

Lilly (LEG) Components	Туре	Value	Form
Estradiol (CAS 50-28-2)	Excursion Limit	0.075 ug/m3	(30 minutes)
	TWA (12hrs)	0.025 ug/m3	
	TWA (8hrs)	0.04 ug/m3	
Elanco OEL Components	Туре	Value	
Trenbolone Acetate (CAS 10161-34-9)	TWA (12hrs)	0.05 ug/m3	
•	TWA (8hrs)	0.07 ug/m3	

**Biological limit values**No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Open handling is not recommended. Use appropriate control measures such as fume hood, ventilated enclosure, isolator (eg. glovebag, glovebox), or closed material transfer systems.

Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Chemical resistant gloves.

Other Chemical-resistant gloves and impermeable body covering to minimize skin contact.

Respiratory protection Respirator selection must be based on known or anticipated exposure levels, the hazards of the

product and the safe working limits of the respirator. Select appropriate respirator for physical

characteristics of material. Select respirator with appropriate protection factor.

Thermal hazards Not available.

General hygiene considerations

The intact implant is not considered hazardous under normal handling procedures.

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.

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.

### 9. Physical and chemical properties

**Appearance** 

Physical state Solid.

**Form** Solid. Cylindrical pellets packaged as an implant.

Color Light yellow Odor Odorless

Odor threshold

pH

No data available.

range

No data available. Flash point No data available. **Evaporation rate** Flammability (solid, gas) No test data available.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

No data available.

Flammability limit - upper

(%)

No data available.

Explosive limit - lower (%) No data available. Explosive limit - upper (%) No data available.

No data available. Vapor pressure No data available. Vapor density No data available. Relative density

Solubility(ies)

Solubility (water) Insoluble

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

No data available.

**Auto-ignition temperature** No data available. **Decomposition temperature** No data available. No data available. **Viscosity** 

Other information

No data available. **Density Explosive properties** Not explosive.

**Oxidizing properties** No oxidizing properties. Potential for dust

explosion

No data available.

# 10. Stability and reactivity

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

Material is stable under normal conditions. **Chemical stability** Possibility of hazardous Hazardous polymerization does not occur.

reactions

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

Hazardous decomposition products formed under fire conditions.

# 11. Toxicological information

# Information on toxicological effects

Based on available data, the classification criteria are not met. **Acute toxicity** 

**Test Results** Components **Species** 

Estradiol (CAS 50-28-2)

Acute Dermal

LD Rabbit > 100 mg/kg No deaths or toxicity.

Oral

LD Rat > 500 mg/kg No deaths.

Trenbolone Acetate (CAS 10161-34-9)

Oral

LD50 Rat 5000 mg/kg

Skin corrosion/irritation Rabbit: No irritation. (Estradiol)

Based on available data, the classification criteria are not met.

Serious eye damage/eye

Rabbit: Slight irritation. (Estradiol)

irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

Due to lack of data the classification is not possible. Respiratory sensitization Due to lack of data the classification is not possible. Skin sensitization

Germ cell mutagenicity 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 (Trenbolone Acetate)

Based on available data, the classification criteria are not met.

May cause cancer. IARC Group 1 (sufficient evidence of carcinogenicity in humans). Carcinogenicity

Estrogen-only menopausal therapy is carcinogenic to humans (Group 1) (Estradiol)

IARC has not classified trenbolone acetate for carcinogenicity. NTP and OSHA have not listed trenbolone as a human carcinogen. Androgens as a class are considered probable human

carcinogens.

IARC Monographs. Overall Evaluation of Carcinogenicity

Estradiol (CAS 50-28-2) 1 Carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Estradiol (CAS 50-28-2) Known To Be Human Carcinogen.

May damage fertility or the unborn child. May cause harm to breastfed babies. Reproductive tissue Reproductive toxicity

changes, decreased fertility, menstrual irregularities, fetal changes, and developmental changes in

offspring. (Estradiol and Trenbolone Acetate)

Specific target organ toxicity -

single exposure

Reproductive organs. See also the Reproductive Effects section. (Estradiol)

Based on available data, the classification criteria are not met.

Specific target organ toxicity -

repeated exposure

Reproductive organs. See also the Reproductive Effects section. (Estradiol)

Based on available data, the classification criteria are not met.

**Aspiration hazard** No aspiration toxicity classification

# 12. Ecological information

Very toxic to aquatic life with long lasting effects. **Ecotoxicity** 

Components		Species	Test Results
Estradiol (CAS 50-28-2)			
Chronic			
Other	NOEC	Pseudokirchnerella subcapitata	>= 0.523 mg/l, 72 h
Aquatic			
Acute			
Algae	EC50	Algae	> 3.1 mg/l, 72 h (Desmodesmus subspicatus)
Crustacea	EC50	Water flea (Daphnia magna)	2.87 mg/l, 48 h
Fish	LC50	Medaka, high-eyes (Oryzias latipes)	460 μg/l, 72 h
Chronic			
Crustacea	NOEC	Water flea (Daphnia magna)	0.2 mg/l, 48 h
Fish	LC50	Medaka, high-eyes (Oryzias latipes)	0.002 μg/l, 96 h

# LILLY AQUATIC EXPOSURE GUIDELINES:

**Estradiol** 

Drinking water LAEG (at the point where surface water is taken for drinking water):

Chronic LAEG (at the edge of the chronic mixing zone):  $0.0009 \mu g/l$ Acute LAEG (at the edge of the acute mixing zone): 0.009 µg/l

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

No data available on bioaccumulation. Bioaccumulative potential

Material name: Component TE-S, TE-G, TE-IS Implants, or Compudose G (TE-G) 4374 Version #: 04 Revision date: 03-26-2019 Issue date: 03-17-2015

 $0.0002 \mu g/l$ 

Partition coefficient n-octanol / water (log Kow)

Estradiol 4.01

Mobility in soilNo data available.Other adverse effectsNot available.

# 13. Disposal considerations

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

# 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

UN number UN3077

**UN proper shipping name** Environmentally hazardous substance, solid, n.o.s. (Estradiol, Trenbolone Acetate)

Transport hazard class(es)

Class 9
Subsidiary risk Label(s) 9
Packing group III
Environmental hazards Yes
ERG Code 9L

Special precautions for user Not available.

Other information

Passenger and cargo

aircraft

Cargo aircraft only Allowed with restrictions.

Allowed with restrictions.

**IMDG** 

UN number UN3077

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Estradiol, Trenbolone

Acetate)

Transport hazard class(es)

Class 9
Subsidiary risk Label(s) 9
Packing group

**Environmental hazards** 

Marine pollutant Yes
EmS F-A, S-F
Special precautions for user Not available.
sport in bulk according to Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and

Annex II of MARPOL 73/78 a the IBC Code

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.

**Toxic Substances Control Act (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 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Classified hazard Carcinogenicity categories Reproductive toxicity

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.

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.

**California Proposition 65** 

WARNING: WARNING: This product contains a chemical known to the State of California to cause cancer and

birth defects or other reproductive harm.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Estradiol (CAS 50-28-2) Listed: January 1, 1988

California Proposition 65 - CRT: Listed date/Developmental toxin

Estradiol (CAS 50-28-2) 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

\*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** 03-17-2015

No

**Revision date** 03-26-2019

Version # 04

List of abbreviations LEG: Lilly Exposure Guideline.

TWA: Time Weighted Average Value.

LD: Lethal Dose.

LD50: Lethal Dose 50%.

IARC: International Agency for Research on Cancer.

NTP: National Toxicology Program.
OSHA: Occupational Safety & Health Administration.

NOEC: No observed effect concentration. EC50: Effective Concentration 50%. LC50: Lethal Concentration 50%.

**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 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:

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