SAFETY DATA SHEET



1. Identification

Product identifier Estradiol Benzoate and Trenbolone Acetate Extended Release Implant

Other means of identification

Synonyms Synovex® * Sustained-release Synovex® Plus * Synovex® ONE-Feedlot * Synovex® ONE-Grass *

Synovex® ONE Grower * Synovex LA 400 Growth and Finishing Implants for Steers and Heifers *

Synovex LA-F * Synovex LA-G

Recommended use Veterinary product
Recommended restrictions Not for human use
Manufacturer/Importer/Supplier/Distributor information

Company Name (US) Zoetis Inc.

10 Sylvan Way

Parsippany, New Jersey 07054 (USA)

Rocky Mountain Poison &

Drug Safety

1-866-531-8896

Product Support/Technical

Services

1-888-963-8471

Emergency telephone

numbers

CHEMTREC (24 hours): 1-800-424-9300

International CHEMTREC (24 hours): +1-703-527-3887

Company Name (EU) Zoetis Belgium S.A.

Rue Laid Burniat 1 1348 Louvain-la-Neuve

Belgium

Telephone +32 10 808080

Emergency telephone

number

International CHEMTREC (24 hours): +1-703-527-3887

Contact E-Mail VMIPSrecords@zoetis.com

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Carcinogenicity Category 1A

Reproductive toxicity Category 1A

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement May cause cancer. May damage fertility or the unborn child.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Wear protective gloves/protective clothing/eye protection/face protection.

Response If exposed or concerned: Get medical advice/attention.

Storage Store locked up.

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

Hazard(s) not otherwise

classified (HNOC)

None known.

Material name: Estradiol Benzoate and Trenbolone Acetate Extended Release Implant Version #: 04 Revision date: 10-24-2022 Issue date: 01-05-2015

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Polyethylene glycol		25322-68-3	<15
Ethylcellulose		9004-57-3	5.41
Dibutyl sebacate		109-43-3	<2
Magnesium stearate		557-04-0	<2
Estradiol Benzoate		50-50-0	3.5 mg / pellet
Trenbolone Acetate		10161-34-9	25 mg / pellet

Composition comments

In accordance with 29 CFR 1910.1200, the exact percentage composition of this mixture has been withheld as a trade secret.

4. First-aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Wash off with soap and water. Get medical attention if irritation develops and persists. Get medical

advice/attention if you feel unwell.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Remove

contact lenses, if present and easy to do.

Water spray. Foam. Powder. Carbon dioxide (CO2).

During fire, gases hazardous to health may be formed.

Do not use water jet as an extinguisher, as this will spread the fire.

Ingestion

Rinse mouth. Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

Most important

symptoms/effects, acute and

delaved

Direct contact with eyes may cause temporary irritation. Exposure may cause temporary irritation, redness, or discomfort.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

General information

IF exposed or concerned: Get medical advice/attention. For personal protection, see section 8 of the SDS. 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.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Specific hazards arising from

the chemical

and precautions for firefighters

Special protective equipment

Fire fighting Use water spray to cool unopened containers.

equipment/instructions

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

No unusual fire or explosion hazards noted. General fire hazards

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ensure adequate ventilation. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Avoid contact with eyes, skin, and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Local authorities should be advised if significant spillages cannot be contained.

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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.

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.

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.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear appropriate personal protective equipment. Avoid dust formation. Do not breathe dust. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash thoroughly after handling. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Store locked up. Protect from moisture. Keep containers tightly closed in a dry, cool and well-ventilated place. @ 20 - 25C / 68 - 77F. Keep away from heat and sources of ignition. Protect from sunlight. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of

Value

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Components

туре		
TWA	0.2 μg/m³	
Туре	Value	Form
TWA	3 mg/m3	Respirable fraction.
	10 mg/m3	Inhalable fraction.
e Level (WEEL) Guides		
Туре	Value	
TWA	10 mg/m3	
	TWA Type TWA E Level (WEEL) Guides Type	TWA 0.2 μg/m³ Type Value TWA 3 mg/m3 10 mg/m3 e Level (WEEL) Guides Type Value

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

Exposure guidelines OEL Additional Information: Estradiol Benzoate - Skin (May be absorbed through the skin and

cause systemic effects.)

Control banding approach Trenbolone acetate: Zoetis OEB 5 (control exposure to <1ug/m3)

Type

Appropriate engineering controls

Keep air contamination levels below the exposure limits or within the OEB range listed above in

this section. General ventilation normally adequate.

Individual protection measures, such as personal protective equipment

Eye/face protection If contact is likely, safety glasses with side shields are recommended.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear suitable protective clothing. Use protective clothing (uniforms, lab coats, disposable

coveralls, etc.) in both production and laboratory areas.

Respiratory protection No personal respiratory protective equipment normally required.

Thermal hazards Not applicable.

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General hygiene considerations

Observe any medical surveillance requirements. 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.

9. Physical and chemical properties

Appearance Pellets.
Physical state Solid.
Form Solid.

Color
Not available.
Odor
Not applicable.
Odor threshold
Not available.
PH
Not available.
Melting point/freezing point
Not available.
Initial boiling point and boiling
Not available.

range

Flash point

Evaporation rate

Flammability (solid, gas)

Upper/lower flammability or explosive limits

Explosive limit - lower (%)

Explosive limit - upper (%)

Not available.

Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Explosive properties Not explosive. **Oxidizing properties** Not oxidizing.

10. Stability and reactivity

ReactivityThe 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. Excessive heat. high humidity Keep away from heat, hot

surfaces, sparks, open flames and other ignition sources.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

11. Toxicological information

Information on likely routes of exposure

InhalationHealth injuries are not known or expected under normal use.Skin contactMay be absorbed through the skin and cause systemic effects.

Trenbolone Acetate Species: Rabbit

Severity: Non-irritating

Eye contact Direct contact with eyes may cause temporary irritation.

Material name: Estradiol Benzoate and Trenbolone Acetate Extended Release Implant Version #: 04 Revision date: 10-24-2022 Issue date: 01-05-2015

Eye contact

Trenbolone Acetate Species: Rabbit

Severity: Minimal

Health injuries are not known or expected under normal use. Ingestion

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation. Exposure may cause temporary

irritation, redness, or discomfort.

Information on toxicological effects

Acute toxicity May be absorbed through the skin and cause systemic effects.

Species Components **Test Results**

Dibutyl sebacate (CAS 109-43-3)

Acute Oral

LD50 Rat 16000 mg/kg

Estradiol Benzoate (CAS 50-50-0)

Acute

Oral

LD50 Rat 5000 mg/kg

Magnesium stearate (CAS 557-04-0)

Acute

Inhalation

> 2000 mg/m3 LC50 Rat

Oral

LD50 Rat > 2000 mg/kg

Skin corrosion/irritation Due to partial or complete lack of data the classification is not possible.

Corrosivity

Trenbolone Acetate Species: Rabbit

Severity: Non-irritating

Serious eye damage/eye

irritation

Direct contact with eyes may cause temporary irritation.

Eve Contact

Trenbolone Acetate Species: Rabbit

Severity: Minimal

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

This product is not expected to cause skin sensitization. Skin sensitization

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

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

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

Reproductive toxicity May damage fertility or the unborn child. Systemic exposure may affect reproductive hormone

regulation and thus affect fertility and maintenance of pregnancy. May cause adverse effects on

the developing fetus.

Material name: Estradiol Benzoate and Trenbolone Acetate Extended Release Implant

Reproductivity

Trenbolone Acetate 2 ug/kg Reproductive & Fertility, Fertility

Result: NOEL Species: Pig

Organ: No route specified

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

Aspiration hazard

Not classified.

repeated exposure

Not an aspiration hazard.

12. Ecological information

Ecotoxicity

Based on available data, the classification criteria are not met for hazardous to the aquatic environment. 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

Polyethylene glycol (CAS 25322-68-3)

Aquatic Acute

Fish LC50 Atlantic salmon (Salmo salar) > 1000 mg/l, 96 hours

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential Mobility in soil

No data available for this product. 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 instructions

Avoid release to the environment. Do not discharge into drains, water courses or onto the ground. 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.

Local disposal regulations

Hazardous waste code

Dispose in accordance with all applicable regulations.

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

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.

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

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

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

SDS US

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 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Yes

chemical

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.

Safe Drinking Water Act

Contains component(s) regulated under the Safe Drinking Water Act.

(SDWA)

US state regulations

California Proposition 65



WARNING: This product can expose you to Estradiol Benzoate, which is known to the State of California to

cause birth defects or other reproductive harm. For more information go

to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Developmental toxin

Estradiol Benzoate (CAS 50-50-0)

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

Estradiol Benzoate (CAS 50-50-0)

Listed: April 1, 1990

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

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

International Inventories

United States & Puerto Rico

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	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
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No

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

Toxic Substances Control Act (TSCA) Inventory

No

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
 01-05-2015

 Revision date
 10-24-2022

Version # 04

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: Synonyms