This SDS packet was issued with item: 078394079

N/A



Revision date: 15-Oct-2013

Version: 2.0

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

Product Identifier

Material Name: Testosterone Propionate-Estradiol Benzoate Implant

Trade Name: Chemical Family: Synovex H Steroid

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against Intended Use: Veterinary formulation Restrictions on Use: Not for human use

Details of the Supplier of the Safety Data Sheet

Zoetis Inc. 100 Campus Drive, P.O. Box 651 Florham Park, New Jersey 07932 (USA) Rocky Mountain Poison Control Center Phone: 1-866-531-8896 Product Support/Technical Services Phone: 1-800-366-5288

Emergency telephone number: CHEMTREC (24 hours): 1-800-424-9300 Contact E-Mail: VMIPSrecords@zoetis.com Zoetis Belgium S.A. Mercuriusstraat 20 1930 Zaventem Belgium

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

2. HAZARDS IDENTIFICATION

Appearance: White liquid Classification of the Substance or Mixture GHS - Classification

> Acute Oral Toxicity: Category 4 Reproductive Toxicity: Category 1A Carcinogenicity: Category 1B

EU Classification:

EU Indication of danger: Toxic to reproduction: Category 1 Carcinogenic: Category 2

Т

EU Symbol: EU Risk Phrases:

R22 - Harmful if swallowed. R45 - May cause cancer. R60 - May impair fertility. R61 - May cause harm to the unborn child.

Label Elements

Signal Word:	Danger
Hazard Statements:	H302 - Harmful if swallowed
	H350 - May cause cancer
	H360FD - May damage fertility. May damage the unborn child.

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Precautionary Statements:

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

P270 - Do not eat, drink or smoke when using this product

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

P308 + P313 - IF exposed or concerned: Get medical attention/advice

P301+ P312 - IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell

- P330 Rinse mouth
- P405 Store locked up

P501 - Dispose of contents/container in accordance with all local and national regulations



Other Hazards	
Long Term:	Repeat-dose studies in animals have shown a potential to cause adverse effects on liver. Occupational studies have shown that males working with estrogen-like compounds have shown clinical signs of hyperestrogenism including enlarged breasts and milk secretion. Loss of libido, breast tenderness, and changes in sex hormone levels have also occurred. Occupational exposure in females has resulted in menstrual irregularities (breakthrough bleeding, menstrual flow changes, spotting and amenorrhea).
Known Clinical Effects:	Clinical use has caused effects on reproductive system, including prolonged erection (priapism), breast development in males (gynecomastia), loss of libido decreased sperm count, impairment of male fertility, development of male characteristics (masculinization), development of male characteristics in the female fetus, menstrual irregularities, changes in cervical erosion and secretion, impairment of female fertility. Clinical use of this drug has caused prostate cancer, liver cancer and kidney cancer.
Australian Hazard Classification (NOHSC):	Hazardous Substance. Non-Dangerous Goods.
Note:	This document has been prepared in accordance with standards for workplace safety, which

This document has been prepared in accordance with standards for workplace safety, which requires the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warning included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your workplace.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous

Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	GHS Classification	%
Estradiol Benzoate	50-50-0	200-043-7	Carc.Cat.1;R45 Repr.Cat.1;R60 Repr.Cat.1;R61	Repr. 1A (H360FD) Carc.1B (H350)	1-10
Testosterone propionate	57-85-2	200-351-1	Carc. Cat.2;R45 Repr. Cat.1;R60 Repr. Cat.1;R61 Xn;R22	Repr. 1A (H360FD) Carc.1B (H350) Acute Tox. 4 (H302)	70-80

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Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	GHS Classification	%
Non-hazardous Ingredients	Proprietary	Not Listed	Not Listed	Not Listed	10-20
Povidone	9003-39-8	Not Listed	Not Listed	Not Listed	<0.1

Additional Information:

Ingredient(s) indicated as hazardous have been assessed under standards for workplace safety.

For the full text of the R phrases and CLP/GHS abbreviations mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of First Aid Measures Eye Contact:	Flush with water while holding eyelids open for at least 15 minutes. Seek medical attention immediately.
Skin Contact:	Remove contaminated clothing. Flush area with large amounts of water. Use soap. Seek medical attention.
Ingestion:	Never give anything by mouth to an unconscious person. Wash out mouth with water. Do not induce vomiting unless directed by medical personnel. Seek medical attention immediately.
Inhalation:	Remove to fresh air and keep patient at rest. Seek medical attention immediately.
Most Important Symptoms and Effe Symptoms and Effects of Exposure: Medical Conditions Aggravated by Exposure:	cts, Both Acute and Delayed For information on potential signs and symptoms of exposure, See Section 2 - Hazards Identification and/or Section 11 - Toxicological Information. None known
Indication of the Immediate Medical	Attention and Special Treatment Needed

Notes to Physician: None

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Extinguish fires with CO2, extinguishing powder, foam, or water.

 Special Hazards Arising from the Substance or Mixture

 Hazardous Combustion
 Formation of toxic gases is possible during heating or fire.

 Products:
 Products:

Fire / Explosion Hazards: Fine particles (such as dust and mists) may fuel fires/explosions.

Advice for Fire-Fighters

During all fire fighting activities, wear appropriate protective equipment, including self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personnel involved in clean-up should wear appropriate personal protective equipment (see Section 8). Minimize exposure.

Environmental Precautions

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Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release.

Methods and Material for Containment and Cleaning Up Measures for Cleaning / Contain the source of spill if it is safe to do so. Collect spill with absorbent material. Clean spill area thoroughly. Additional Consideration for Large Spills: Non-essential personnel should be evacuated from affected area. Report emergency situations immediately. Clean up operations should only be undertaken by trained personnel.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Restrict access to work area. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. When handling, use appropriate personal protective equipment (see Section 8). Wash hands and any exposed skin after removal of PPE. Wash thoroughly after handling. Releases to the environment should be avoided. Review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure or environmental releases. Potential points of process emissions of this material to the atmosphere should be controlled with dust collectors, HEPA filtration systems or other equivalent controls.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions: Specific end use(s):

Store as directed by product packaging. No data available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters	
Estradiol Benzoate Zoetis OEL TWA 8-hr	0.2 µg/m³, Skin
Testosterone propionate Zoetis OEL TWA 8-hr	4µg/m³, Skin
Exposure Controls	
Engineering Controls:	Engineering controls should be used as the primary means to control exposures. General room ventilation is adequate unless the process generates dust, mist or fumes. Keep airborne contamination levels below the exposure limits listed above in this section.
Personal Protective Equipment:	Refer to applicable national standards and regulations in the selection and use of personal protective equipment (PPE).
Hands:	Impervious, disposable gloves (double suggested) are recommended if skin contact with drug product is possible and for bulk processing operations.
Eyes:	Wear safety glasses or goggles if eye contact is possible.
Skin:	Impervious disposable protective clothing is recommended if skin contact with drug product is possible and for bulk processing operations.
Respiratory protection:	If the applicable Occupational Exposure Limit (OEL) is exceeded, wear an appropriate respirator with a protection factor sufficient to control exposures to below the OEL.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Odor: Molecular Formula:	Liquid No data available. Mixture	
Solvent Solubility: Water Solubility: pH: Melting/Freezing Point (°C): Boiling Point (°C): Partition Coefficient: (Method, pH, Er No data available	No data available Insoluble No data available. No data available No data available. ndpoint, Value)	
Decomposition Temperature (°C):	No data available.	
Evaporation Rate (Gram/s): Vapor Pressure (kPa): Vapor Density (g/ml): Relative Density: Viscosity:	No data available No data available No data available No data available No data available	
Flammablity: Autoignition Temperature (Solid) (°C): Flammability (Solids): Flash Point (Liquid) (°C): Upper Explosive Limits (Liquid) (% by Vol.):		

Lower Explosive Limits (Liquid) (% by Vol.):

Color:
Odor Threshold:
Molecular Weight:

White No data available. Mixture

No data available No data available No data available No data available No data available

10. STABILITY AND REACTIVITY

Reactivity: Chemical Stability: Possibility of Hazardous Reactions Oxidizing Properties: Conditions to Avoid: Incompatible Materials: Hazardous Decomposition Products: No data available Stable under normal conditions of use.

None

Fine particles (such as dust and mists) may fuel fires/explosions. As a precautionary measure, keep away from strong oxidizers No data available

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity: (Species, Route, End Point, Dose)

Testosterone propionate

Rat Oral LD 50 1000 mg/kg Mouse Oral LD 50 1350mg/kg

Estradiol Benzoate

Rat Oral LD50 5000 mg/kg

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11. TOXICOLOGICAL II	NFORMATION

Repeated Dose Toxicity: (Duration, Species, Route, Dose, End Point, Target Organ)

Testosterone propionate5 Day(s)MouseOral1000 mg/kg/dayNOAELNone identified28 Day(s)MonkeySubcutaneous2.7 mg/kg/dayLOAELEndocrine system

Reproduction & Developmental Toxicity: (Study Type, Species, Route, Dose, End Point, Effect(s))

Testosterone propionateEmbryo / Fetal DevelopmentMonkeySubcutaneous1.25 mg/kg/dayLOELTeratogenicEmbryo / Fetal DevelopmentRatSubcutaneous0.4 mg/kgNOELTeratogenic

Carcinogenicity: (Duration, Species, Route, Dose, End Point, Effect(s))

Testosterone propionate Not specified Rat Subcutaneous 80-100 mg LOEL Tumors, Male reproductive system

 Carcinogen Status:
 See below

 Testosterone propionate
 IARC:

 IARC:
 Group 2A (Probably Constraints)

 OSHA:
 Listed

 Group 2A (Probably Carcinogenic to Humans)

 A:

 Listed

Estradiol Benzoate IARC: OSHA:

Group 1 (Carcinogenic to Humans) Listed

Group 3 (Not Classifiable)

Povidone IARC:

12. ECOLOGICAL INFORMATION

Environmental Overview:	Environmental properties have not been investigated. Releases to the environment should be avoided.
Toxicity:	No data available
Persistence and Degradability:	No data available
Bio-accumulative Potential:	No data available
Mobility in Soil:	No data available

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13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods:

Dispose of waste in accordance with all applicable laws and regulations. Member State specific and Community specific provisions must be considered. 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.

14. TRANSPORT INFORMATION

The following refers to all modes of transportation unless specified below.

Not regulated for transport under USDOT, EUADR, IATA, or IMDG regulations.

15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Canada - WHMIS: Classifications WHMIS hazard class: Class_D, Division 2, Subdivision A



Estradiol Benzoate CERCLA/SARA 313 Emission reporting California Proposition 65 Australia (AICS): EU EINECS/ELINCS List	Not Listed Not Listed Present 200-043-7
Non-hazardous Ingredients CERCLA/SARA 313 Emission reporting California Proposition 65 EU EINECS/ELINCS List	Not Listed Not Listed Not Listed
Povidone CERCLA/SARA 313 Emission reporting California Proposition 65 Inventory - United States TSCA - Sect. 8(b) Australia (AICS):	Not Listed Not Listed Present Present

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15. REGULATORY INFORMATION

EU EINECS/ELINCS List

Testosterone propionate CERCLA/SARA 313 Emission reporting California Proposition 65 Inventory - United States TSCA - Sect. 8(b) Australia (AICS): EU EINECS/ELINCS List

Not Listed Not Listed Present Present 200-351-1

Not Listed

16. OTHER INFORMATION

Text of R phrases and GHS Classification abbreviations mentioned in Section 3

Acute toxicity, oral-Cat.4; H302 - Harmful if swallowed Carcinogenicity-Cat.1B; H350 - May cause cancer Reproductive toxicity-Cat.1A; H360FD - May damage fertility. May damage the unborn child.

Carcinogenic: Category 2 Toxic to reproduction: Category 1 Xn - Harmful

R22 - Harmful if swallowed. R45 - May cause cancer. R60 - May impair fertility. R61 - May cause harm to the unb	orn child.
Data Sources:	The data contained in this MSDS may have been gathered from confidential internal sources, raw material suppliers, or from the published literature.
Reasons for Revision:	Updated Section 1 - Identification of the Substance/Preparation and the Company/Undertaking. Updated Section 2 - Hazard Identification. Updated Section 3 - Composition / Information on Ingredients. Updated Section 4 - First Aid Measures. Updated Section 5 - Fire Fighting Measures. Updated Section 6 - Accidental Release Measures. Updated Section 7 - Handling and Storage. Updated Section 8 - Exposure Controls / Personal Protection. Updated Section 9 - Physical and Chemical Properties. Updated Section 10 - Stability and Reactivity. Updated Section 11 - Toxicology Information. Updated Section 12 - Ecological Information. Updated Section 13 - Disposal Considerations. Updated Section 14 - Transport Information. Updated Section 15 - Regulatory Information.
Prepared by:	Toxicology and Hazard Communication

Toxicology and Hazard Communication Zoetis Global Risk Management

Zoetis Inc. believes that the information contained in this Material 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.

End of Safety Data Sheet

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