

## **CIPIOSYN**

### Introduction:

Estradiol Cypionate (CPE) is a semi-synthetic derivate of 17 $\beta$  Estradiol, a hormone synthesized by the ovarian follicle, developed to optimize reproductive results in bovines treated with progestogens.

### Action:

Like other steroid hormones, the estrogens act mainly through the regulation of gene expression. These hormones diffuse due to its lipophilic nature, through the cytoplasmic membrane and once inside the cell bind to a nuclear receptor which shows high homology with the steroid receptors. It has been determined that the estrogen receptor exists in two isoforms encoded by separate genes: the  $\beta$  estrogen receptor (ER  $\beta$ )  $\alpha$  and estrogen receptor (ER  $\alpha$ ), which are located on chromosomes 14 and 6 respectively.  $\beta$  estrogen receptor (ER  $\beta$ ) is expressed in various tissues including the central nervous system, cardiovascular system, immune system, urogenital tract, gastrointestinal tract, kidneys and lungs. The ER  $\beta$  is also expressed in the mammary gland; however the ER  $\alpha$  is the main estrogen receptor in this tissue, as in the uterus, where it is found in greater numbers. The estrogen receptor, as  $\beta$  and  $\alpha$  isoforms, has a DNA binding region of high homology (97%) and a binding zone to estrogen more variable with 59.1% homology.

### Formula:

Estradiol Cypionate.....50 mg  
Excipients..... e.q. 100 ml

### Species which the veterinary medicinal product is intended for:

Bovines.

### Therapeutic Indications:

Complement in estrus induction and synchronization with progestagens.  
Complement in estrus induction and synchronization with prostaglandins and GnRH.  
Complement in the treatment of postpartum anestrus.

Dosage:Treatment with Progestagens

## Estrus Synchronization:

Day 0: Insert intravaginal device (DIB<sup>®</sup>) + 2 mg Estradiol Benzoate (Gonadiol<sup>®</sup>)Day 8: Remove device + 500 µg Cloprostenol (Cyclase<sup>®</sup>) + 0.5 mg Estradiol Cypionate (Cipiosyn<sup>®</sup>)

FTAI (Fixed Time Artificial Insemination): 52-56 hs after device removal

## Anestrus post-partum:

Day 0: Insert intravaginal device + 2 mg Estradiol Benzoate (Gonadiol<sup>®</sup>)Day 8: Remove device + 500 µg Cloprostenol (Cyclase<sup>®</sup>) + 0.5 mg Estradiol Cypionate (Cipiosyn<sup>®</sup>)  
+ 400 IU Equine Chorionic Gonadotrophin (eCG – Novormon<sup>®</sup>)

FTAI (Fixed Time Artificial Insemination): 52-56 hs after device removal

Treatment with Prostaglandins and GnRH

## Estrus Synchronization with HeatSynch programme:

Day 0: 50 µg GnRH synthetic analogue (Gonasyn<sup>®</sup>)Day 7: 500 µg Cloprostenol (Cyclase<sup>®</sup>)Day 8: 0.5 mg Estradiol Cypionate (Cipiosyn<sup>®</sup>)

Day 10: FTAI (Fixed Time Artificial Insemination)

Route of administration:

Intramuscular injection

Toxicity:DL<sub>50</sub> subcutaneous (mouse) = > 1000 mg/kgDL<sub>50</sub> intraperitoneal (mouse) = > 1000 mg/kgWithdrawal period:

MEAT: 0 days.

MILK: 0 days

Pharmaceutical form:

Oil based injectable solution



Luis de Sarro 501 (B1838DQK)  
Luis Guillón, Buenos Aires, Argentina.  
(011) 4367-6100 | [syntex@syntexar.com](mailto:syntex@syntexar.com)

[www.syntexar.com](http://www.syntexar.com)

tecnologías  
para la  
vida

Commercial presentations:

- Vial containing 50 ml of Estradiol Cypionate 0.5 mg/ml
- Vial containing 100 ml of Estradiol Cypionate 0.5 mg/ml

General Precautions:

- Keep between 10 and 30 °C, protected from light.
- During the transport it should be kept in a cool, dry place and protected from light.
- No special care is required in the destruction of the container.

**PRODUCT USE FOR REPRODUCTION MANAGEMENT**

**VETERINARY USE ONLY**

**KEEP OUT OF REACH OF CHILDREN**

Manufactured by:

**SYNTEX S.A.**

Luis de Sarro 501 – (B1838DQK)

Luis Guillón - Bs. As. – Argentina

Telephone/fax: +54 (011) 4367-6100

E-mail: [syntex@syntexar.com](mailto:syntex@syntexar.com)