

## PACKAGE LEAFLET:

Colfive 5,000,000 IU/ml concentrate for oral solution for calves, pigs, lambs, chickens and turkeys [AT, CZ, DE, EL, ES, HU, IT, PL, PT, RO, SK]

### 1. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER AND OF THE MANUFACTURING AUTHORISATION HOLDER RESPONSIBLE FOR BATCH RELEASE, IF DIFFERENT

Marketing authorisation holder and manufacturer responsible for batch release:

Industrial Veterinaria, S.A.  
Esmeralda, 19  
08950 Esplugues de Llobregat  
(Barcelona) Spain

Manufacturer responsible for batch release:

aniMedica GmbH  
Im Südfeld 9  
48308 Senden-Bösensell Germany

### 2. NAME OF THE VETERINARY MEDICINAL PRODUCT

Colfive 5,000,000 IU/ml concentrate for oral solution for calves, pigs, lambs, chickens and turkeys [AT, CZ, DE, EL, ES, HU, IT, NPL, PT, RO, SK]

*Colistin sulfate*  
*Colistin sulfate*

### 3. STATEMENT OF THE ACTIVE SUBSTANCE(S) AND OTHER INGREDIENT(S)

Each ml contains:

**Active substance:**

Colistin sulfate                    5,000,000IU

**Excipients:**

Benzyl alcohol (E1519)            10 mg

Clear orange-brown solution

### 4. INDICATION(S)

Calves, lambs, pigs, chickens, turkeys:

Treatment and metaphylaxis of enteric infections caused by non-invasive *E. coli* susceptible to colistin sulfate. The presence of the disease in the herd should be established before metaphylactic treatment.

### 5. CONTRAINDICATIONS

Do not use in known cases of hypersensitivity to colistin sulfate or to any of the excipients.

Do not use in known cases of resistance to polymyxins.

Do not use in horses, particularly in foals, since colistin sulfate, due to a shift in the gastrointestinal microflora balance could lead to the development of antimicrobial associated colitis (Colitis X), typically associated with *Clostridium difficile*, which may be fatal.

## 6. ADVERSE REACTIONS

None known.

If you notice any side effects, even those not already listed in this package leaflet or you think that the medicine has not worked, please inform your veterinary surgeon.

Alternatively you can report via your national reporting system {national system details}.

## 7. TARGET SPECIES

Cattle (calves), pigs, sheep (lambs), chickens and turkeys

## 8. DOSAGE FOR EACH SPECIES, ROUTE(S) AND METHOD OF ADMINISTRATION

Oral use.

In drinking water/milk use

Calves, lambs, pigs: 100 000 IU of colistin sulfate per kg body weight daily for 3-5 consecutive days in drinking water or milk (replacer) in calves, equivalent to 0.20 ml of the concentrate solution per 10 kg body weight per day for 3-5 days.

Chickens and turkeys: 75 000 IU of colistin sulfate per kg body weight daily for 3-5 consecutive days in drinking water, equivalent to 15 ml of the concentrate solution per Ton of body weight per day for 3-5 days.

Duration of treatment should be limited to the minimum time necessary for the treatment of the disease.

Any medicated water which is not consumed within 24 hours should be discarded.

Any medicated milk which is not consumed within 6 hours should be discarded.

## 9. ADVICE ON CORRECT ADMINISTRATION

### Direct oral administration to individual animals

The recommended daily dose should be divided into two if the product is to be administered directly into the mouth of the animal.

Prior to direct oral administration, the product should be diluted with a volume of drinking water equivalent to 2.5 x the volume of product concentrate to be administered.

### Administration via drinking water

The intake of medicated water depends on the clinical condition of the animals. In order to obtain the correct dosage the concentration of colistin sulfate has to be adjusted accordingly. Carefully calculate the average body weight to be treated and the average daily water consumption before each treatment.

Medicated water should be made every day, immediately prior to provision.

The medicated water should be the only source of drinking water for the animals for the entire duration of the treatment period.

Water uptake should be monitored at frequent intervals.

With the following formula, we can calculate an exact dosage:

$$\frac{\text{...ml of the product}}{\text{per kg body weight and day}} \times \text{Average body weight (kg)} = \frac{\text{...ml of the product}}{\text{Average daily water intake (l/animal)}} = \text{...ml of the product per litre of drinking water}$$

- Administration without a dosing pump:

The treatment is distributed in a tank over a period of 24 hours, for 3-5 consecutive days.

The product is added to a volume of the drinking water corresponding to the volume consumed by the animals over the treatment period (24 hours) to achieve a dose of 100 000 IU of colistin sulfate per kg body weight for pigs, lambs and calves and 75 000 IU of colistin sulfate per kg body weight for chickens and turkeys.

- Administration via a dosing pump

The treatment is distributed over a period of 24 hours, for 3-5 consecutive days.

A dosing pump is used to add a stock solution at a pre-determined concentration to the drinking water.

## **10. WITHDRAWAL PERIOD**

Cattle (calves), sheep (lambs) and pigs

Meat and offal: 1 day

Chickens and turkeys

Meat and offal: 1 day

Eggs: Zero days

## **11. SPECIAL STORAGE PRECAUTIONS**

Keep out of the sight and reach of children.

This veterinary medicinal product does not require any special storage conditions.

Do not use this veterinary medicinal product after the expiry date which is stated on the label after EXP. The expiry date refers to the last day of that month.

Shelf-life after first opening the container: 3 months.

Shelf life after reconstitution in water according to directions: 24 hours

Shelf life after reconstitution in milk according to directions: 6 hours

## **12. SPECIAL WARNING(S)**

Special warnings for each target species:

As an adjunct to treatment, good management and hygiene practices should be introduced in order to reduce the risk of infection and to control the potential build up of resistance.

Colistin sulfate exerts concentration-dependent activity against Gram-negative bacteria. Following oral administration high concentrations are achieved in the gastrointestinal tract, i.e. the target site, due to the poor absorption of the substance. These factors indicate that a longer duration of treatment than the one indicated in section 8 of this package leaflet, leading to unnecessary exposure, is not recommended.

Special precautions for use in animals:

Do not use colistin sulfate as a substitute for good management practices.

Colistin sulfate is a last resort drug in human medicine for treatment of infections caused by certain multi-drug resistant bacteria. In order to minimise any potential risk associated with widespread use of colistin sulfate, its use should be limited to treatment or treatment and metaphylaxis of diseases, and should not be used for prophylaxis.

Whenever possible, colistin sulfate should only be used based on susceptibility testing.

Use of the product deviating from the instructions given in the leaflet may lead to treatment failures and increase the prevalence of bacteria resistant to colistin sulfate. There is cross-resistance between colistin sulfate and polymyxin B.

In the case of newborn animals and animals with severe gastrointestinal and renal disorders, systemic exposure to colistin sulfate may be increased. Neuro- and nephrotoxic alterations may occur.

Special precautions to be taken by the person administering the veterinary medicinal product to animals:

People with known hypersensitivity to polymyxins, such as colistin sulfate, should avoid contact with the veterinary medicinal product.

Avoid direct contact with skin and eyes while handling the product. Personal protective equipment consisting of gloves and protective goggles should be worn when handling and dosing the veterinary medicinal product.

Wash splashes from skin immediately with soap and plenty of water.

In case of accidental eye exposure, wash with plenty of water and seek medical attention immediately and show the label to the physician.

If you develop symptoms following exposure such as skin rash, you should seek medical advice and show the physician this warning. Swelling of the face, lips or eyes or difficulty in breathing are more serious symptoms and require urgent medical attention.

Wash hands after use.

Use during pregnancy, lactation or lay:

The safety of the veterinary medicinal product has not been established during pregnancy, lactation or lay. However, colistin sulfate is poorly absorbed after oral administration, therefore the use of colistin sulfate during pregnancy, lactation or lay should not lead to particular problems. Use only according to the benefit-risk assessment by the responsible veterinarian.

Interaction with other medicinal products and other forms of interaction:

After oral administration of colistin sulfate interaction with anaesthetics (curarimimetic agents) and myorelaxants may not be excluded in individual cases. The combination with aminoglycosides and levamisole should be avoided. The effects of colistin sulfate may be antagonized by binary cations (iron, calcium, magnesium) and by unsaturated fatty acids and polyphosphates.

Incompatibilities:

In the absence of compatibility studies, this veterinary medicinal product must not be mixed with other veterinary medicinal products.

**13. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCT OR WASTE MATERIALS, IF ANY**

Medicines should not be disposed of via wastewater or household waste. Any unused veterinary medicinal product or waste materials derived from such veterinary medicinal product should be disposed of in accordance with local requirements.

Ask your veterinary surgeon or pharmacist how to dispose of medicines no longer required. These measures should help to protect the environment.

**14. DATE ON WHICH THE PACKAGE LEAFLET WAS LAST APPROVED**

DD/MM/YYYY

**15. OTHER INFORMATION**

The active ingredient colistin sulfate is very persistent in soils.

Package sizes:

Box with a bottle of 100 ml

Bottle of 1 l

Bottle of 5 l

Not all pack sizes may be marketed.

**PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGE OF 1 l and 5 l LABEL**  
*All the information required is conveyed on the container*

**PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGE – COMBINED LABEL AND PACKAGE LEAFLET**

**LABEL 1 I and 5 I**

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**Active substance:**

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**Excipients:**

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Clear orange-brown solution

**4. PHARMACEUTICAL FORM**

Concentrate for oral solution

**5. PACKAGE SIZE**

1 I

5 I

**6. INDICATION(S)**

Calves, lambs, pigs, chickens, turkeys:

Treatment and metaphylaxis of enteric infections caused by non-invasive *E. coli* susceptible to colistin sulfate. The presence of the disease in the herd should be established before metaphylactic treatment.

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## **8. ADVERSE REACTIONS**

None known.

If you notice any side effects, even those not already listed in this label or you think that the medicine has not worked, please inform your veterinary surgeon.

Alternatively you can report via your national reporting system {national system details}.

## **9. TARGET SPECIES**

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## **10. DOSAGE FOR EACH SPECIES, ROUTE(S) AND METHOD OF ADMINISTRATION**

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• Administration via a dosing pump

The treatment is distributed over a period of 24 hours, for 3-5 consecutive days.

A dosing pump is used to add a stock solution at a pre-determined concentration to the drinking water.

## **12. WITHDRAWAL PERIOD**

Withdrawal period

Cattle (calves), sheep (lambs) and pigs

Meat and offal: 1 day

Chickens and turkeys

Meat and offal: 1 day

Eggs: Zero days

## **13. SPECIAL STORAGE PRECAUTIONS**

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**16. DATE ON WHICH THE LABEL WAS LAST APPROVED**

DD/MM/YYYY

**17. OTHER INFORMATION**

The active ingredient colistin sulfate is very persistent in soils.

Package sizes:

Box with a bottle of 100 ml

Bottle of 1 l

Bottle of 5 l

Not all pack sizes may be marketed.

**18. THE WORDS “FOR ANIMAL TREATMENT ONLY” AND CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE, IF APPLICABLE**

For animal treatment only.

To be supplied only on veterinary prescription.

**19. THE WORDS “KEEP OUT OF THE SIGHT AND REACH OF CHILDREN”**

Keep out of the sight and reach of children.

**20. EXPIRY DATE**

EXP

Once broached, use by...

Shelf-life after first opening the immediate container: 3 months.

Shelf life after reconstitution in water according to directions: 24 hours

Shelf life after reconstitution in milk according to directions: 6 hours

**21. MARKETING AUTHORISATION NUMBER**

**22. MANUFACTURER’S BATCH NUMBER**

Batch