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:
ANDRÉS PINTALUBA, S.A.
C/Prudenci Bertrana nº 5
Polígono Industrial Agro-Reus
43206-Reus
ESPAÑA

2. NAME OF THE VETERINARY MEDICINAL PRODUCT

APSALIQ COLISTIN 3,000,000 IU/ml solution for use in drinking water/milk for pig, cattle, sheep, chickens and turkeys
Colistin sulfate

3. STATEMENT OF THE ACTIVE SUBSTANCE AND OTHER INGREDIENTS

Each ml of clear yellow solution contains:

Active substance:

Colistin (as sulfate)	3,000,000 IU

Excipients:

Benzyl alcohol (E-1519)	10 mg

4. INDICATIONS

Treatment and metaphylaxis of enteric infections caused by non-invasive *E.coli* susceptible to colistin.

The presence of disease in the herd should be established before metaphylactic treatment.

5. CONTRAINDICATIONS

Do not use in horses, particularly in foals, since colistin, 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.

Do not use in case of hypersensitivity to colistin or to any of the excipients.
Do not use in case of resistance to polymyxins.

6. ADVERSE REACTIONS

None known. If you notice any serious effects or other effects not mentioned in this leaflet, please inform your veterinary surgeon

7. TARGET SPECIES

Cattle (calf), sheep (lamb), pig, chicken and turkey.

8. DOSAGE FOR EACH SPECIES, ROUTE AND METHOD OF ADMINISTRATION

To be administered orally.

In drinking water/milk use.

Calves, lambs, pigs: 100 000 IU of colistin per kg body weight daily for 3-5 consecutive days in drinking water or milk (replacer) in calves, equivalent to 0.33 ml of the concentrate solution per 10 kg body weight per day for 3-5 days.

Chicken and turkeys: 75 000 IU of colistin per kg body weight daily for 3-5 consecutive days in drinking water, equivalent to 25 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/milk which is not consumed within 24 hours should be discarded.

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 1.5 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 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.

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

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

• 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 per kg body weight for pigs, lambs and calves and 75 000 IU of colistin 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.

9. ADVICE ON CORRECT ADMINISTRATION

Not applicable.

10. WITHDRAWAL PERIOD

Cattle (calves) and Sheep (lambs)
Meat and offal: 1 day
Milk: Not authorised for use in animals producing milk for human consumption.

Pigs
Meat and offal: 1 day

Chickens and turkeys
Meat and offal: 1 day
Egg: 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.
Store in the original container in order to protect from light.
Shelf-life after first opening the immediate packaging: 3 months.
Shelf life after dilution according to directions: 24 hours.

12. SPECIAL WARNINGS

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 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, leading to unnecessary exposure, is not recommended.

Special precautions for use in animals

Use of the product should be based on susceptibility testing and take into account official and local antimicrobials policies.

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

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

Colistin 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, its use should be limited to treatment and metaphylaxis of diseases, and should not be used for prophylaxis.

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

Use of the product deviating from the instructions given in the SPC may lead to treatment failures and increase the prevalence of bacteria resistant to colistin.

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

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

Avoid direct contact with skin and eyes while handling the product.

Personal protective equipment consisting of coveralls, gloves and safety glasses should be worn when handling the veterinary medicinal product.

If you develop symptoms following exposure such as skin rash, you should seek medical advice and show the doctor 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.

Other precautions

None.

Use during pregnancy, lactation or lay

The safety of colistin during pregnancy, lactation or lay was not investigated in target species. However, colistin is poorly absorbed after oral administration; therefore the use of colistin during pregnancy, lactation or lay should not lead to particular problems. Use only accordingly to the benefit-risk assessment by the responsible veterinarian during these periods.

Interaction with other medicinal products and other forms of interaction

After oral administration of colistin sulfate interaction with anaesthetics 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.

There is cross-resistance between colistin and polymyxin B.

Overdose (symptoms, emergency procedures, antidotes)

None.

Incompatibilities

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

14. DATA ON WHICH THE PACKAGE LEAFLET WAS LAST APPROVED

15. OTHER INFORMATION

To be supplied only on veterinary prescription

Administration by a veterinary surgeon or under their direct responsibility

EXPIRY DATE:
<CAD {month/year}>
Once opened, use by …

PACK SIZE
<1 L bottles> <5 L bottles>
Not all pack sizes may be marketed.

MARKETING AUTHORISATION NUMBER

BATCH NUMBER
Batch {number}