1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Amproline 400 mg/mL solution for use in drinking water for chickens and turkeys

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each mL contains:

Active substance(s):
Amprolium.....400.0 mg
(equivalent to amprolium hydrochloride 452.4 mg)

Excipient(s):

Qualitative composition of excipients and other constituents	**Quantitative composition if that information is essential for proper administration of the veterinary medicinal product**
Sorbic acid (E200)	0.5 mg
Purified water	

Solution for use in drinking water
Clear and yellow solution

3. CLINICAL INFORMATION

3.1. Target species

Chickens (broilers, pullets, layers and breeder hens), turkeys.

3.2. Indications for use for each target species

Treatment of intestinal coccidiosis caused by *Eimeria* spp.

3.3. Contraindications

Do not use in cases of hypersensitivity to the active substance or to any of the excipients.

3.4. Special warnings

As with any antimicrobial, frequent and repeated use of antiprotozoal agents of the same class can lead to resistance development. Cross-resistance has been shown between amprolium and anticoccidial drugs having the same mode of action. Use of the veterinary medicinal product/amprolium should be carefully considered when susceptibility testing has shown resistance to amprolium/anticoccidials because its effectiveness may be reduced. As with all anticoccidials, prolonged use may result in the development of resistant strains.
In case of detection of lack of efficacy during treatment, communicate it to competent national authorities.

3.5. Special precautions for use

Special precautions for safe use in the target species
The veterinary medicinal product is not intended for prophylaxis.
This veterinary medicinal product should be reserved in case of coccidiosis outbreaks due to non-availability of vaccine, in case of lack of efficacy of vaccine and in vaccinated flocks if a severe coccidial challenge is diagnosed before immunity has fully developed.
Use of the veterinary medicinal product should be based on identification and susceptibility testing of the target pathogen(s). If this is not possible, therapy should be based on epidemiological information and knowledge of susceptibility of the target pathogens at farm level, or at local/regional level. Use of the veterinary medicinal product should be in accordance with official, national and regional antimicrobial policies.

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

This veterinary medicinal product is acidic and may cause irritation to, or corrosion of, the skin, eyes, throat and airways.
Avoid all physical contact with the veterinary medicinal product, including any vapours.
Do not eat, drink or smoke whilst handling this veterinary medicinal product.
Wear impervious gloves and protective glasses when handling the veterinary medicinal product.
The selected protective gloves should satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
In the case of contact with skin or eyes, wash the affected area with clean running water immediately and remove any contaminated clothes. If irritation persists, seek medical advice and show the label to the physician.
In case of accidental ingestion, rinse the mouth with fresh water, seek medical advice immediately and show the label to the physician.
People with known hypersensitivity to amprolium or to sorbic acid should avoid contact with the veterinary medicinal product.
Wash hands and exposed skin after use.

Special precautions for the protection of the environment
Amprolium is classified as a very persistent substance in soil.

3.6. Adverse events

Chickens, turkeys:
None known.

Reporting adverse events is important. It allows continuous safety monitoring of a veterinary medicinal product. Reports should be sent, preferably via a veterinarian, to either the marketing authorisation holder or the national competent authority via the national reporting system. See the package leaflet for respective contact details.

3.7. Use during pregnancy, lactation or lay

Laboratory studies have not produced any evidence of teratogenic effects. The safety of amprolium has not been established in laying birds.

Laying birds:
Use only according to the benefit/risk assessment by the responsible veterinarian.

3.8. Interaction with other medicinal products and other forms of interaction

Amprolium is a thiamine analogue. Therefore, the efficacy of amprolium may be reduced during a simultaneous administration of products containing vitamin B-complex.

3.9. Administration routes and dosage

For use in drinking water.
The posology for each target species is 20 mg amprolium / kg body weight / day (equivalent to 0.5 mL of veterinary medicinal product / 10 kg bodyweight/day) for 5 to 7 consecutive days.

To ensure a correct dosage, body weight should be determined as accurately as possible.
The intake of medicated water depends on the clinical condition of the animals. In order to obtain the correct dosage, the concentration of amprolium may need to be adjusted accordingly.
Based on the recommended dose and the number and weight of animals to be treated, the exact daily concentration of the veterinary medicinal product should be calculated according to the following formula:

$$\frac{\text{0.05 mL veterinary medicinal product / kg body weight day} \times \text{Average body weight (kg) of animals to be treated}}{\text{Average daily water intake (L/animal)}} = \text{mL of veterinary medicinal product per litre of drinking water}$$

Sufficient access to the system of water supply should be available for the animals to be treated to ensure adequate water consumption. No other source of drinking water should be available during the medication period. Medicated drinking water should be replaced every 24 hours.

After the end of the medication period the water supply system should be cleaned appropriately to avoid intake of sub-therapeutic amounts of the active substance.

The veterinary medicinal product should not be used in contact with metal pipework or containers.

3.10. Symptoms of overdose (and where applicable, emergency procedures, antidotes)

A prolonged use at high doses can produce thiamine deficiency. This deficiency can be compensated for by an appropriate thiamine intake.

3.11 Special restrictions for use and special conditions for use, including restrictions on the use of antimicrobial and antiparasitic veterinary medicinal products in order to limit the risk of development of resistance

Not applicable.

3.12. Withdrawal periods

Chickens and turkeys:
- Meat and offal: zero days.
- Eggs: zero days.

4. PHARMACOLOGICAL INFORMATION

4.1. ATCvet code

QP51AX09.

4.2. Pharmacodynamics

Amprolium is an anticoccidial which belongs to the thiamine analogues family. Amprolium acts by interfering as a competitive antagonist of thiamine within thiamine transport mechanisms. It interferes in the carbohydrate metabolism required for coccidies multiplication and survival.

In *in-vitro* studies it was shown that the uptake of thiamine by schizonts of *Eimeria tenella* and by host intestinal cells can occur through passive diffusion or by an active, energy-and pH-dependent process. Amprolium competitively inhibited both systems, however, the parasite was shown to be more sensitive to amprolium than the host.

As shown with *Eimeria maxima* inoculated chicken, the administration of Amprolium resulted in a proportion of morphologically abnormal macrogametes and oocysts which may be considered the reason for a reduced sporulation rate.

4.3. Pharmacokinetics

Amprolium is weakly absorbed after oral administration. Maximum plasma drug concentration is reached 4 hours later.
Amprolium is excreted mainly via faeces.

Environmental properties

Amprolium is very persistent in soil.

5. PHARMACEUTICAL PARTICULARS

5.1. Major incompatibilities

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

5.2. Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 2 years
Shelf life after first opening the immediate packaging: 4 months
Shelf life after dilution according to directions: 24 hours

5.3. Special precautions for storage

Do not store above 30°C.

5.4. Nature and composition of immediate packaging

100 mL can: white and opaque can made of high density polyethylene, closed with a white and opaque cap made of high density polyethylene with a ring and having polyethylene foam inside.
1 and 5 L cans: white and opaque can made of high density polyethylene closed with a purple and opaque cap made of polypropylene and having a tamper-proof ring and a seal made of aluminium/PET/polyethylene.

Not all pack sizes may be marketed.

5.5. Special precautions for the disposal of unused veterinary medicinal product or waste materials derived from the use of such products

Medicines should not be disposed of via wastewater or household waste.
Use take-back schemes for the disposal of any unused veterinary medicinal product or waste materials derived thereof in accordance with local requirements and with any national collection systems applicable to the veterinary medicinal product concerned.

6. NAME OF THE MARKETING AUTHORISATION HOLDER

HUVEPHARMA SA

7. MARKETING AUTHORISATION NUMBER(S)

VPA10453/002/001

8. DATE OF FIRST AUTHORISATION

30 AUGUST 2019

9. DATE OF THE LAST REVISION OF THE SUMMARY OF THE PRODUCT CHARACTERISTICS

22 OCTOBER 2023

10. CLASSIFICATION OF VETERINARY MEDICINAL PRODUCTS

Veterinary medicinal product subject to prescription.

Detailed information on this veterinary medicinal product is available in the Union Product Database *(https://medicines.health.europa.eu/veterinary)*.