SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Apravet 100 000 IU/g premix for medicated feeding stuff for pigs and rabbits

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each g contains:

Active Substance:
Apramycin (as apramycin sulphate) 100 000 IU – international units

Excipients:
For the full list of excipients, see section 6.1

3. PHARMACEUTICAL FORM

Premix for medicated feeding stuff
Light brown granules

4. CLINICAL PARTICULARS

4.1 Target species

Pigs and rabbits

4.2 Indications for use, specifying the target species

Pigs:
Treatment and metaphylaxis of bacterial enteritis caused by micro-organisms susceptible to apramycin such as *Escherichia coli*.

Rabbits:
Reduction in mortality and clinical signs related to epizootic enterocolitis due to *Escherichia Coli.*

In the case of metaphylaxis, the presence of the disease in the group must be established before the product is used.

4.3 Contraindications

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

4.4 Special warnings for each target species

The uptake of medication by animals can be altered as a consequence of illness. In case of insufficient uptake of feed animals should be treated parenterally.
The use of the product should be combined with good management practices e.g. good hygiene, proper ventilation, no overstocking.

4.5 Special precautions for use

Special precautions for use in animals

Use of the product should be based on susceptibility testing. Official, national and regional antimicrobial policies should be taken into account when the veterinary medicinal product is used.
Use of the product deviating from the instructions given in the SPC may increase the prevalence of bacteria resistant to the apramycin and may decrease the effectiveness of treatment with aminoglycosides due to the potential for cross resistance

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

People with known hypersensitivity to apramycin or any other aminoglycoside should avoid contact with the product.
This product may cause irritation after skin or eye contact or inhalation. During preparation and administration of the medicated feedingstuff, skin, eye and oral contact with the product, as well as inhalation of dust, should be avoided. Wear a protective suit, gloves and an appropriate dust mask (either a disposable half mask respirator conforming to European Standard EN149 or a non-disposable respirator conforming to European Standard EN140 with a filter to EN 143) when mixing and handling the product.
In the event of eye contact, rinse the affected area with plenty of water. In the event of skin contact, wash thoroughly with soap and water. If irritation persists, seek medical advice. Wash hands after use. In the event of accidental ingestion, seek medical assistance immediately and show the package label to the physician. In case of onset of symptoms after exposure such as skin rash, seek medical advice immediately and show the package label to the physician. Swelling of the lips, face and eyes or difficulty breathing are more serious symptoms and require urgent medical assistance.

4.6 Adverse reactions (frequency and seriousness)

None known.

4.7 Use during pregnancy, lactation or lay

Laboratory studies in the rat and rabbit have not produced any evidence of teratogenic effects.
However, the use is not recommended in pregnant or lactating animals.

4.8 Interaction with other medicinal products and other forms of interaction

In certain conditions with a high degree of humidity there might be an apparent interaction with lectins.

4.9 Amounts to be administered and administration route

In-feed use.

Pigs:
The dosage is 4 000-8 000 IU/kg of bodyweight per day (equivalent to 4-8 g of the product per 100kg of bodyweight per day).
Administer as the sole feeding stuff for at least 21 days.

Rabbits:
The dosage is 12 000 IU/kg of bodyweight per day (equivalent to 12 g of the product per 100kg of bodyweight per day) for a period up to 21 days.

To ensure a correct dosage, bodyweight should be determined as accurately as possible to avoid under-dosing.
For all species, the consumption of the medicated feed may depend of the clinical condition of the animals. In order to guarantee a correct dosing, the concentration of the product in the feed should be adjusted accordingly.

To adjust dosing properly following calculation can be used:

$$\frac{\text{… g product/kg b.w./day} \times \text{average b.w. (kg)}}{\text{average daily feed intake (kg/animal)}} = \text{… kg of the product/tone of feed}$$

Mixing Instructions:
It is recommended to initially mix the product with a small amount of the feeding stuff (20-50 kg) before incorporating it in the full amount of feeding stuff.
Medicated feed may be pelleted using a pre-conditioning step for 5 minutes at a temperature not exceeding 85°C.

4.10 Overdose (symptoms, emergency procedures, antidotes), if necessary

No adverse effects were observed in pigs that were given up to nine times the recommended dose.

4.11 Withdrawal period(s)

Pigs: meat and offal - 21 days
Rabbits: meat and offal - 1 day

5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: Intestinal anti-infective – antibiotics - apramycin
ATCvet code: QA07AA92

5.1 Pharmacodynamic properties

As an aminoglycoside antibiotic, apramycin binds to the 30S ribosomal subunit and interferes with protein synthesis. Through mechanisms not yet completely elucidated, it increases the permeability of the bacterial cell membrane and subsequently has a bactericidal action.
The overall spectrum includes many aerobic or facultative anaerobic Gram-negative bacteria, including Enterobacteriaceae. It has no activity against anaerobic bacteria or under anaerobic conditions.
The most important mechanism of resistance against apramycin is the production of modifying enzymes that are usually encoded by resistance genes derived from plasmids. Depending on their spectrum, these enzymes may cause cross-resistance between aminoglycosides. Resistance may also be caused by a change of the ribosomal attachment sites, or the system allowing the penetration of the cell.
Susceptibility of the E. coli strains from pigs to apramycin can vary geographically and over time.
Until harmonised international interpretative criteria relevant for susceptibility testing are available for apramycin, nationally approved and validated methods should be followed.

5.2 Pharmacokinetic particulars

Apramycin is very poorly absorbed orally. The oral administration of apramycin is intended for antimicrobial activity within the gut.
Tissue distribution is limited but nevertheless the best of all aminoglycosides.
Very little metabolism of apramycin takes place in the animal
Apramycin is excreted in its active form via the kidney.

5.3 Environmental properties

Apramycin is persistent in soils

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Starch, pregelatinised
Wheat flour

6.2 Major incompatibilities

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

6.3 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 3 years
Shelf life after first opening the immediate packaging: 6 months
Shelf life after incorporation into meal feed: 3 months
Shelf life after incorporation into pelleted feed: 1 month

6.4 Special precautions for storage

Veterinary medicinal product as packaged for sale: Do not store above 25°C. Store in the original package. Protect from moisture.
Veterinary medicinal product after first opening of the immediate packaging: Do not store above 25°C. Store in the original package.
Medicated feed (mashed and pelleted): Do not store above 25°C.

6.5 Nature and composition of immediate packaging

Polyethylene bag in a three-ply paper bag

Pack Sizes:
Bags of 1 kg, 5 kg or 20 kg.
Not all pack sizes may be marketed.

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

Any unused veterinary medicinal product or waste materials derived from such veterinary medicinal product should be disposed of in accordance with local requirements.

7. MARKETING AUTHORISATION HOLDER

Huvepharma NV
Uitbreidingstraat 80
2600 Antwerp
Belgium

8. MARKETING AUTHORISATION NUMBER

Vm 30282/4026

9. DATE OF FIRST AUTHORISATION

02 February 2017

10. DATE OF REVISION OF THE TEXT

October 2021

Approved 08 October 2021