

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Alphaflorosol 100 mg/ml solution for use in drinking water for chickens and pigs

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

1 ml contains:

Active substance:

Florfenicol 100 mg

Excipients:

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Solution for use in drinking water.

Colourless or almost colourless, viscous solution with slightly characteristic odour, free from mechanical impurities.

4. CLINICAL PARTICULARS

4.1 Target species

Chicken (broilers) and pig

4.2 Indications for use, specifying the target species

In chickens:

Treatment of infections caused by *E.coli* strains susceptible to florfenicol.

In pigs:

Treatment of swine respiratory disease associated with *Actinobacillus pleuropneumoniae* or *Pasteurella multocida* susceptible to florfenicol. Treatment of Glässer-disease caused by *Haemophilus parasuis* susceptible to florfenicol.

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

4.3 Contraindications

Do not use in boars intended for breeding purposes.

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

4.4 Special warnings for each target species

The treated pigs should be placed under special observation. On each of the five days of treatment, unmedicated drinking water should not be given until the full daily amount of medicated drinking water has been ingested by pigs.

If there are no signs of improvement after three days of treatment, the diagnosis should be reviewed and, if necessary, the treatment changed.

In case of insufficient water intake animals should be treated parenterally.

4.5 Special precautions for use

Special precautions for use in animals

Use of the product should be based on susceptibility testing of the bacteria isolated from the animal. Official and local antimicrobial policies should be taken into account when the product is used. Use of the product deviating from the instructions given in the SPC may increase the prevalence of bacteria resistant to the florfenicol. Treatment should not exceed 5 days. In case of sufficient uptake of medicated water animals should be treated parenterally.

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

People with known hypersensitivity to florfenicol or polyethylene glycols should avoid contact with the veterinary medicinal product. In case of accidental skin contamination rinse with water. Wear gloves when handling the veterinary medicinal product.

4.6 Adverse reactions (frequency and seriousness)

There are no known side effects in chickens. In pigs slight reduction of water consumption, dark brown faeces and constipation may be observed during treatment. Commonly observed adverse effects are diarrhoea and/or perianal and rectal erythema/oedema which may affect the animals. These effects are transient. In a few of the affected animals, prolapse of the rectum, that resolves without treatment may be observed.

The frequency of adverse reactions is defined using the following convention:

- very common (more than 1 in 10 animals treated displaying adverse reaction(s))
- common (more than 1 but less than 10 animals in 100 animals treated)
- uncommon (more than 1 but less than 10 animals in 1,000 animals treated)
- rare (more than 1 but less than 10 animals in 10,000 animals treated)
- very rare (less than 1 animal in 10,000 animals treated, including isolated reports).

4.7 Use during pregnancy, lactation or lay

Pigs: The safety of the veterinary medicinal product has not been established during pregnancy and lactation. The use is not recommended during pregnancy or lactation. Do not use in boars intended for breeding purposes. Studies in rats have revealed evidence of potential adverse effects on the male reproductive system.
Chickens: Do not use in birds in lay.

4.8 Interaction with other medicinal products and other forms of interaction

No data available.

4.9 Amounts to be administered and administration route

In drinking water use.

Chickens: 20 mg florfenicol per kg bodyweight per day (equivalent 0.2 ml product/kg b.w./day). The duration of treatment: 5 consecutive days.

Pigs: 10 mg florfenicol per kg bodyweight per day corresponds to 10 ml product per 100 kg bodyweight. The duration of treatment: 5 days.

The medicated water should be the only source of drinking water during the treatment.

To avoid underdosing body weight should be determined as accurately as possible.

The uptake of medicated water depends on the clinical condition of the animals and the temperature of the environment. In order to obtain the correct dosage the concentration of the product has to be adjusted accordingly based on the actual water intake and bodyweight of the animals treated using calculation as follows:

$\frac{\text{x ml product per kg bodyweight per day} \times \text{mean bodyweight (kg) of animals to be treated}}{\text{mean daily water consumption (l) per animal}} = \text{x ml product per litre of drinking water}$
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The concentration of florfenicol in the medicated water should not exceed 1 gram /liter in order to avoid precipitation. Medicated drinking water should be replaced every 24 hours.

The veterinary medicinal product should be added to the drinking water by thorough stirring until the product is completely dissolved. Sufficient access to the water supply should be available for the animals to be treated to ensure adequate water intake.

The water supply should be cleaned appropriately after the end of the medication period to avoid intake of subtherapeutic amounts of active substance.

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

In case of overdosing, a decrease in weight gain, food and water consumption, peri-anal erythema and oedema and modification of some haematological and biochemical parameters indicative of dehydration may be observed.

4.11 Withdrawal period(s)

Chickens:

Meat and offal: 8 days.

Not for use in birds producing or intended to produce eggs for human consumption.

Pigs:

Meat and offal: 23 days.

5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: Antibacterial for systemic use, Amphenicols, florfenicol.

ATCvet code: QJ01BA90

5.1 Pharmacodynamic properties

Florfenicol is a broad-spectrum synthetic antibiotic that is active against most Gram-positive and Gram-negative bacteria isolated from domestic animals. Florfenicol acts by inhibition of protein synthesis at the ribosomal level and is bacteriostatic. Florfenicol is a derivative of thiamphenicol, in which the hydroxyl group has been replaced with fluorine.

Laboratory tests have confirmed the activity of florfenicol against the bacterial pathogens most commonly isolated in birds, including *Escherichia coli*, and in pigs, including *Actinobacillus pleuropneumoniae*, *Pasteurella multocida*, *Haemophilus parasuis*.

Resistance to florfenicol mainly comes from the presence of specific (e.g. florR) or multi-substance (e.g. AcrAB-TolC) efflux pumps. The genes corresponding to these mechanisms are coded on genetic elements such as plasmids, transposons or gene cassettes. The acquired florfenicol resistance is mainly encoded by chromosomal genes; floR and cfr. In the past few years a transmissible florfenicol resistance encoding plasmid was also detected.

Minimum Inhibitory Concentration (MIC) Breakpoints for Veterinary Pathogens CLSI, 2018):
Actinobacillus pleuropneumoniae, *Pasteurella multocida*: susceptible: ≤ 2 $\mu\text{g/ml}$, intermediately susceptible: 4 $\mu\text{g/ml}$, resistant: ≥ 8 $\mu\text{g/ml}$.

5.2 Pharmacokinetic particulars

Chickens: After administration to chickens one oral dose of 30 mg florfenicol per kg bodyweight reached maximum serum concentration of 3.20 $\mu\text{g/ml}$ within 63.1 minutes after dosing. Oral bioavailability was 55.3%. Florfenicol is well distributed in the body.

The highest tissue levels were measured in kidneys (4.1 – 4.7 $\mu\text{g/g}$), the lungs (2.8 – 2.9 $\mu\text{g/g}$), muscle (2.0 – 2.4 $\mu\text{g/g}$), bile (1.6 – 2.75 $\mu\text{g/g}$), intestine (appr. 2.0 $\mu\text{g/g}$), heart muscle (1.7 – 2.1 $\mu\text{g/g}$), liver (1.5 – 1.8 $\mu\text{g/g}$), and spleen (1.3 – 1.5 $\mu\text{g/g}$).

Pigs: When pigs were given free access for 5 days to water medicated with the veterinary medicinal product at a concentration of 100 mg florfenicol per litre of water, serum concentrations of florfenicol exceeded 1 $\mu\text{g/ml}$ for the entire 5 day treatment period except for a couple of short excursions below 1 $\mu\text{g/ml}$. Approximately 50% of florfenicol is remained unchanged, and rest of it in form of metabolites (mainly florfenicol amine) is excreted from the body, primarily in urine.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Macrogol 300 (Polyethylene glycol)

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: 2 years.

Shelf life after first opening the immediate packaging: 28 days.

Shelf life after dilution according to directions: 24 hours.

6.4. Special precautions for storage

Store below 30°C.

Do not refrigerate or freeze.

Storage conditions after first opening of the container: store below 25°C.

6.5 Nature and composition of immediate packaging

Pack sizes: Bottle of 1 l.

Container: White polypropylene (PP) bottle.

Closures: PP screw cap with induction sealing and 60 ml measuring cup.

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

ALPHA-VET Animal Health Ltd.
H-1194 Budapest, Hofherr A. u. 42.
Telephone number: +36/22-516-546
Fax number (optional): +36/22-516-546
E-mail: alpha-vet@alpha-vet.hu

8. MARKETING AUTHORISATION NUMBER(S)

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: DD month YYYY.

10. DATE OF REVISION OF THE TEXT

<{MM/YYYY}>
<{DD/MM/YYYY}>
<{DD month YYYY}>

PROHIBITION OF SALE, SUPPLY AND/OR USE

Not applicable.

A. LABELLING

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PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGE

BOTTLE

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Alphaflorosol 100 mg/ml solution for use in drinking water for chickens and pigs
Florfenicol

2. STATEMENT OF ACTIVE SUBSTANCES

Active substance: Florfenicol 100 mg /ml.

3. PHARMACEUTICAL FORM

Solution for use in drinking water.

4. PACKAGE SIZE

1 litre.

5. TARGET SPECIES

Chickens (broilers) and pigs.

6. INDICATION(S)

7. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the package leaflet before use.

8. WITHDRAWAL PERIOD(S)

Withdrawal periods

Chickens:

Meat and offal 8 days.

Not for use in birds producing or intended to produce eggs for human consumption.

Pigs:

Meat and offal: 23 days.

9. SPECIAL WARNING(S), IF NECESSARY

Read the package leaflet before use.

10. EXPIRY DATE

EXP {month/year}

Once opened use within 28 days.

Once diluted use within 24 hours.

11. SPECIAL STORAGE CONDITIONS

Store below 30°C.

Do not refrigerate or freeze.

Storage conditions after first opening of the container: store below 25°C.

12. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCTS OR WASTE MATERIALS, IF ANY

Disposal: read package leaflet.

13. 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.

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

Keep out of the sight and reach of children.

15. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

ALPHA-VET Animal Health Ltd.
H-1194 Budapest, Hofherr A. u. 42.
Hungary

16. MARKETING AUTHORISATION NUMBER(S)

17. MANUFACTURER’S BATCH NUMBER

Batch {number}

B. PACKAGE LEAFLET

PACKAGE LEAFLET:
Alphaflorosol 100 mg/ml solution for use in drinking water for chickens and pigs

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:

ALPHA-VET Animal Health Ltd., H-1194 Budapest, Hofherr A. u. 42. Hungary.

2. NAME OF THE VETERINARY MEDICINAL PRODUCT

Alphaflorosol 100 mg/ml solution for use in drinking water for chickens and pigs
Florfenicol

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

1 ml contains:

Active substance:

Florfenicol 100 mg

Excipients: Macrogol 300 (Polyethylene glycol).

Colourless or almost colourless, viscous solution with slightly characteristic odour, free from mechanical impurities.

4. INDICATION(S)

In chickens:

Treatment of infections caused by *E.coli* strains susceptible to florfenicol.

In pigs:

Treatment of swine respiratory disease associated with *Actinobacillus pleuropneumoniae* or *Pasteurella multocida* susceptible to florfenicol. Treatment of Glässer-disease caused by *Haemophilus parasuis* susceptible to florfenicol.

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

5. CONTRAINDICATIONS

Do not use in boars intended for breeding purposes.

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

6. ADVERSE REACTIONS

There are no known side effects in chickens.

In pigs slight reduction of water consumption, dark brown faeces and constipation may be observed during treatment.

Commonly observed adverse effects are diarrhoea and/or perianal and rectal erythema/oedema which may affect the animals. These effects are transient. In a few of the affected animals, prolapse of the rectum, that resolves without treatment may be observed.

The frequency of adverse reactions is defined using the following convention:

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- uncommon (more than 1 but less than 10 animals in 1,000 animals treated)
- rare (more than 1 but less than 10 animals in 10,000 animals treated)
- very rare (less than 1 animal in 10,000 animals treated, including isolated reports).

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

Chickens (broilers) and pigs.

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

In drinking water use.

Chickens: 20 mg florfenicol per kg bodyweight per day (equivalent 0.2 ml product/kg b.w./day). The duration of treatment: 5 consecutive days.

Pigs: 10 mg florfenicol per kg bodyweight per day corresponds to 10 ml product per 100 kg bodyweight. The duration of treatment: 5 days.

The medicated water should be the only source of drinking water during the treatment.

To avoid underdosing body weight should be determined as accurately as possible.

The uptake of medicated water depends on the clinical condition of the animals and the temperature of the environment. In order to obtain the correct dosage the concentration of the product has to be adjusted accordingly based on the actual water intake and bodyweight of the animals treated using calculation as follows:

$\frac{\text{x ml product per kg bodyweight per day} \times \text{mean bodyweight (kg) of animals to be treated}}{\text{mean daily water consumption (l) per animal}} = \text{x ml product per litre of drinking water}$
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The concentration of florfenicol in the medicated water should not exceed 1 gram /litre in order to avoid precipitation. Medicated drinking water should be replaced every 24 hours.

9. ADVICE ON CORRECT ADMINISTRATION

The veterinary medicinal product should be added to the drinking water by thorough stirring until the product is completely dissolved. Sufficient access to the water supply should be available for the animals to be treated to ensure adequate water intake.

The water supply should be cleaned appropriately after the end of the medication period to avoid intake of subtherapeutic amounts of active substance.

10. WITHDRAWAL PERIOD(S)

Chickens: meat and offal: 8 days.

Not for use in birds producing or intended to produce eggs for human consumption.

Pigs: meat and offal: 23 days.

11. SPECIAL STORAGE PRECAUTIONS

Keep out of the sight and reach of children.

Store below 30°C.

Do not refrigerate or freeze.

After first opening of the bottle store below 25°C.

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

Shelf life after first opening the immediate packaging: 28 days.

Shelf life after dilution according to directions: 24 hours.

12. SPECIAL WARNING(S)

Special warnings for each target species:

The treated pigs should be placed under special observation. On each of the five days of treatment, unmedicated drinking water should not be given until the full daily amount of medicated drinking water has been ingested by pigs.

If there are no signs of improvement after three days of treatment, the diagnosis should be reviewed and, if necessary, the treatment changed.

In case of insufficient water intake animals should be treated parenterally.

Special precautions for use in animals:

Use of the product should be based on susceptibility testing of the bacteria isolated from the animal.

Official and local antimicrobial policies should be taken into account when the product is used.

Use of the product deviating from the instructions given in the SPC may increase the prevalence of bacteria resistant to the florfenicol.

Treatment should not exceed 5 days.

In case of sufficient uptake of medicated water animals should be treated parenterally.

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

People with known hypersensitivity to florfenicol or polyethylene glycols should avoid contact with the veterinary medicinal product.

In case of accidental skin contamination rinse with water.

Wear gloves when handling the veterinary medicinal product.

Pregnancy and lactation:

Pigs: The safety of the veterinary medicinal product has not been established during pregnancy and lactation. The use is not recommended during pregnancy or lactation.

Do not use in boars intended for breeding purposes. Studies in rats have revealed evidence of potential adverse effects on the male reproductive system.

Chickens: Do not use in birds in lay.

Interaction with other medicinal products and other forms of interaction:

No data available.

Overdose (symptoms, emergency procedures, antidotes):

In case of overdosing, a decrease in weight gain, food and water consumption, peri-anal erythema and oedema and modification of some haematological and biochemical parameters indicative of dehydration may be observed.

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

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

14. DATE ON WHICH THE PACKAGE LEAFLET WAS LAST APPROVED

XXX

15. OTHER INFORMATION

Pack sizes: Bottle of 1 l.

Container: White polypropylene (PP) bottle.

Closures: PP screw cap with induction sealing and 60 ml measuring cup.

For any information about this veterinary medicinal product, please contact the local representative of the marketing authorisation holder.