

## **SUMMARY OF PRODUCT CHARACTERISTICS**

### **1. NAME OF THE VETERINARY MEDICINAL PRODUCT**

Floron 40 mg/g Premix for Medicated Feeding Stuff for Swine

### **2. QUALITATIVE AND QUANTITATIVE COMPOSITION**

Each gram contains:

**Active substance:**

Florfenicol 40 mg

**Excipients:**

Propylene Glycol (E1520) 10 mg

For the full list of excipients, see section 6.1.

### **3. PHARMACEUTICAL FORM**

Premix for medicated feeding stuff.  
Slightly brownish white powder.

### **4. CLINICAL PARTICULARS**

#### **4.1 Target species**

Pigs (Fattening pigs).

#### **4.2 Indications for use, specifying the target species**

In fattening pigs:

For the treatment and prevention of swine respiratory disease in infected herds due to *Pasteurella multocida* susceptible to florfenicol. The presence of the disease should be established in the herd before initiating preventive treatment.

#### **4.3 Contraindications**

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

Do not use in case of known resistance to florfenicol.

See also section 4.7 Use during pregnancy, lactation or lay.

#### **4.4 Special warnings for each target species**

Animals showing a decreased appetite and/or a poor general condition should be treated by the parenteral route.

## 4.5 Special precautions for use

### i) Special precautions for use in animals

The product should be used in conjunction with susceptibility testing and take into account official and local policy relating to the use of antimicrobials.

Use of the product deviating from the instructions given in the SPC may increase the prevalence of bacteria resistant to the florfenicol and may decrease the effectiveness of treatment with other amfenicols, due to the potential for crossresistance.

This premix is intended for the manufacturing of solid medicated feed and cannot be used as is; the incorporation rate of the premix in feed cannot be lower than 5kg/tonne.

This premix contains ground limestone, which can lead to a decrease in food consumption and to a phosphorus calcium imbalance in feed intake. Care should therefore be taken to consider the calcium content of the final medicated feeding stuff. Treatment should not exceed 5 days.

In a field clinical study, within a week after the administration of the last dose, the incidence of pigs presenting either mild depression and/or mild dyspnea and/or pyrexia (40°C) was approx. 20 % in the initially severely ill animals.

### ii) Special precautions to be taken by the person administering the medicinal product to animals

Skin sensitisation may occur.

Avoid skin contact.

Do not handle this product in case of known sensitisation to propylene glycol.

Handle this product with care to avoid exposure during incorporation of premix into feed and administration of medicated feeding stuff to animals, taking all recommended precautions.

Wear either a disposable half-mask respirator conforming to European standard EN 149 or a non-disposable respirator to European Standard EN 140 with a filter to EN 143, chemically resistant gloves, protective coveralls and goggles while incorporating the premix into feed.

Wear gloves and do not smoke, eat, or drink when handling the product or medicated feeding stuff.

Wash hands thoroughly with soap and water after use of the product or medicated feeding stuff.

Rinse thoroughly with water in case of exposure.

If you develop symptoms following exposure such as skin rash, you should seek medical advice immediately and show and take the package leaflet or the label to the physician.

## 4.6 Adverse reactions (frequency and seriousness)

Commonly observed adverse effects are diarrhoea perianal inflammation and rectal eversion. These effects are transient, resolving on cessation of treatment. Increased serum calcium may also be observed.

## 4.7 Use during pregnancy, lactation or lay

The safety of the veterinary medicinal product has not been established in sows during pregnancy and lactation.

Toxicity studies in rats have shown adverse effects on the male reproductive system.  
Do not use in pregnant and lactating sows.  
Do not use in breeding boars.

#### 4.8 Interaction with other medicinal products and other forms of interaction

No data available.

#### 4.9 Amounts to be administered and administration route

To be administered orally, in medicated feeding stuff.

##### Dosage:

10 mg of florfenicol per kg body weight (bw) (equivalent to 250 mg the veterinary medicinal product) per day administered for 5 consecutive days.

##### Administration:

For a daily feed intake of 50 g/kg bodyweight, this dosage corresponds to a rate of incorporation of 5 kg of medicated premix per ton of feed, i.e. 200 ppm of florfenicol. The rate of incorporation of the medicated premix in the feed may be increased in order to achieve the required dosage on a mg/kg bodyweight basis and to take into account the actual feed intake. Thus, the inclusion level may need adjusting as follows to give the correct dose.

$$\frac{250 \text{ mg of the veterinary medicinal product per kg body weight and day}}{\text{Average daily feed intake (kg/animal)}} \times \text{Average pig body weight (kg)} = \text{mg the veterinary medicinal product per kg of feed}$$

Average daily feed intake (kg/animal)

The maximum rate of incorporation is 12.5 kg/ton (500 ppm of florfenicol), higher rates of inclusion may lead to poor palatability and decreased food consumption.

Under no circumstances should the incorporation rate of the premix be below 5 kg/ton of feed.

In all cases the recommended dose of 10 mg of florfenicol per kg of body weight per day, for 5 consecutive days has to be respected.

To ensure a correct dosage body weight should be determined as accurately as possible to avoid underdosing. The required doses should be measured by suitably calibrated weighing equipment.

This product should be incorporated by feed manufacturers under regulatory supervision. Calibrated mixer should be used for incorporation.

It is recommended that the product is added to the mixer containing the feeding stuff ingredients and mixed thoroughly to produce a homogeneous medicated feeding stuff. The product can be incorporated in pelleted feed preconditioned with steam at a temperature not exceeding 85°C.

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

In the event of overdose, a reduction in food and water consumption, together with a decrease in bodyweight may be observed. There may be an increase in refused feed and an increase in serum calcium.

#### **4.11 Withdrawal period(s)**

Meat and offal: 14 days

### **5. PHARMACOLOGICAL PROPERTIES**

Pharmacotherapeutic group: Antibacterials for systemic use, Amphenicols  
ATC vet code: QJ01BA90

#### **5.1 Pharmacodynamic properties**

Florfenicol is a broad-spectrum synthetic antibiotic in the phenicol group 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. However, bactericidal activity has been demonstrated *in-vitro* against *Pasteurella multocida* when florfenicol is present at concentrations above the MIC for 4 to 12 hours.

*In-vitro* testing has shown that florfenicol is active against the bacterial pathogens most commonly isolated in respiratory diseases in pigs, including *Pasteurella multocida*. A total of 230 *Pasteurella multocida* isolates from the respiratory tract of swine were collected between 2002 and 2006 in Belgium, Denmark, France, Germany, Italy, the Netherlands, Poland, Spain and the United Kingdom. The Minimal Inhibitory Concentration (MIC) of florfenicol against the target pathogen ranged from 0.25 to 1 µg/ml with a MIC<sub>90</sub> of 0.5 µg/ml.

The only mechanisms of chloramphenicol resistance that are known to have significant clinical relevance are CAT-mediated inactivation and efflux-pump resistance. Of these, only some of the efflux mediated resistance would also confer resistance to florfenicol and thus have the potential to be affected by florfenicol use in animals.

#### **5.2 Pharmacokinetic particulars**

After administration to pigs by gavage at 10 mg/kg under experimental conditions, absorption of florfenicol was variable but peak serum concentrations of approximately 5 µg/ml were reached approximately 3 hours after dosing. The terminal half-life was between 3 and 4 hours.

When pigs were given free access, for 5 days, to feed medicated with florfenicol (premix for medicated feeding stuff) at the recommended dose of 10 mg/kg serum florfenicol concentrations exceeded 1 µg/ml for more than 16 hours each day of treatment.

Florfenicol is well absorbed when administered orally and following distribution it is rapidly eliminated in the urine and faeces in a ration of 3:1. A fraction is excreted unchanged and the rest is metabolised into 5 major metabolites.

After parenteral dosing of florfenicol to pigs, it has been shown that lung concentrations are similar to serum concentrations.

After a single dose of 10 mg florfenicol/kg b.w. mixed with feed to fasted pigs, maximum plasma concentration of approximately 7.4 µg/ml was reached up to 1.0 hour after dosing. The terminal half-life was approximately 2.8 hours.

## **6 PHARMACEUTICAL PARTICULARS**

### **6.1 List of excipients**

Propylene Glycol (E1520)  
Ground Limestone

### **6.2 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: 4 years  
Shelf life after first opening the immediate packaging: 3 months  
Shelf life after incorporation into meal or pelleted feed: 3 months

### **6.4 Special precautions for storage**

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

### **6.5 Nature and composition of immediate packaging**

PET/AL/PE foil sealed bag containing 1 kg medicated premix.  
Paper/Paper/HDPE sewn bag containing 5 kg, 10 kg or 25 kg medicated premix.

### **6.6 Special precautions for the disposal of unused veterinary medicinal product or waste materials derived from the use of such products, if appropriate**

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**

KRKA, d.d., Novo mesto  
Šmarješka cesta 6  
8501 Novo mesto  
Slovenia

**8. MARKETING AUTHORISATION NUMBER**

Vm 01656/4011

**9. DATE OF FIRST AUTHORISATION**

8 July 2010

**10. DATE OF REVISION OF TEXT**

July 2015

A handwritten signature in black ink, consisting of several loops and a final flourish.

Approved: 06 July 2015