



**College ter Beoordeling van Geneesmiddelen / Medicines Evaluation Board**

**Graadt van Roggenweg 500  
3531 AH Utrecht  
The Netherlands**

**DECENTRALISED PROCEDURE**

**PUBLICLY AVAILABLE ASSESSMENT REPORT FOR A VETERINARY  
MEDICINAL PRODUCT**

**Methoxasol 20/100 mg/ml solution for  
use in drinking water for pigs and broilers**

**June 2012**

## MODULE 1

### PRODUCT SUMMARY

Dutch Registration number	REG NL 109720
EU Procedure number	NL/V/0166/001/DC
Name	Methoxasol 20/100 mg/ml solution for use in drinking water for pigs and broilers
Strength	100/20 mg/ml
Pharmaceutical form	Oral solution
Applicant	Eurovet Animal Health BV Handelsweg 25 5531 AE Bladel the Netherlands
Active substance(s)	Sulfamethoxazol and Trimetoprim
ATC Vetcode	QJ01EW11
Target species	Pigs, broilers
Indication for use	<b>Pigs:</b> Treatment and prevention of respiratory infections caused by <i>Actinobacillus pleuropneumoniae</i> susceptible to trimethoprim and sulfamethoxazole where the disease has been diagnosed in the herd. <b>Broilers:</b> Treatment and prevention of respiratory infections caused by <i>Escherichia coli</i> susceptible to trimethoprim and sulfamethoxazole where the disease has been diagnosed in the flock.

## **MODULE 2**

The Summary of Product Characteristics (SPC) for this product is available on the website:

- <http://mri.medagencies.org/veterinary/>

## MODULE 3

### PUBLIC ASSESSMENT REPORT

Legal basis of original application	Application in accordance with Article 13(1) of Directive 2001/82/EC as amended.
Date of completion of the original decentralised procedure	20 June 2012
Concerned Member States for original procedure	BE, CZ, DK, EL, ES, FI, FR, IT, SK, UK

#### I. SCIENTIFIC OVERVIEW

Methoxasol 20/100 mg/ml solution for use in drinking water for pigs and broilers is produced and controlled using validated methods and tests, which ensure the consistency of the product released on the market.

It has been shown that Methoxasol 20/100 mg/ml solution for use in drinking water for pigs and broilers can be safely used in the target species; the reactions that may be expected are indicated in the SPC.

The product is safe for the user, the consumer of foodstuffs from treated animals and for the environment, when used as recommended. Suitable warnings and precautions are indicated in the SPC.

The efficacy of the product was demonstrated according to the claims made in the SPC.

The overall risk/benefit analysis is in favour of granting a marketing authorisation.

The safety and efficacy aspects of Methoxasol 20/100 mg/ml solution for use in drinking water for pigs and broilers are based on bioequivalence with the European reference product Methoxasol-T oral solution for pigs and broilers REG NL 9106. In 2006 this European Reference Product (ERP) was referred in the framework of article 34 of Directive 2001/82/EC. The European Commission decision, adopted 11 January 2008, concerning "Methoxasol-T" is published on the website of European Commission (Community Register).

#### II. QUALITY ASPECTS

##### A. *Composition*

The proposed veterinary medicinal product is a solution for use in drinking water containing 100 mg/ml sulfamethoxazole and 20 mg/ml trimethoprim as active substances, and propylene glycol, purified water and N-methyl pyrrolidone as solvents. Sodium hydroxide is used for pH adjustment.

The solutions are packed in clear 1000 ml and 5000 ml HDPE bottles, closed with tamper-proof closures (LDPE for the 1000 ml containers and HDPE for the 5000 ml containers). The materials comply with Commission Directive 2002/72/EC (as amended)

The products represent an established pharmaceutical form and their development is adequately described in accordance with the relevant European guidelines.

## ***B. Method of Preparation of the Product***

The products are manufactured fully in accordance with the principles of good manufacturing practice from a licensed manufacturing site.

The product is manufactured using conventional manufacturing techniques. The manufacturing process is a standard manufacturing process. The production process has been validated by production of three full scale batches. Validation reports have been included.

The tests performed during production are described. Adequate in-process specifications are provided.

## ***C. Control of Starting Materials***

The active substances are sulfamethoxazole and trimethoprim, established active substances described in the European Pharmacopoeia. The active substance are manufactured in accordance with the principles of good manufacturing practice. Certificates of suitability have been provided.

The quality of the active substances is suitably controlled by the current version of their monograph of the European Pharmacopoeia, only if it is supplemented by the tests mentioned on the CoS.

Batch analytical data demonstrating compliance with the specifications of both active substances have been provided.

The excipients are in conformity with European Pharmacopoeia requirements.

The primary packaging materials comply with Commission Directive 2002/72/EC (as amended).

## ***D. Specific Measures concerning the Prevention of the Transmission of Animal Spongiform Encephalopathies***

There are no substances within the scope of the TSE Guideline present or used in the manufacture of this product.

## ***E. Control on intermediate products***

Not applicable.

## ***F. Control Tests on the Finished Product***

The finished product specification and controls the relevant parameters for the pharmaceutical form. The tests in the specification, and their limits, are considered appropriate to adequately control the quality of the product.

Satisfactory validation data for the analytical methods have been provided.

Batch analytical data from the proposed production site have been provided demonstrating compliance with the specification.

### **G. Stability**

A re-test period of 60 months for the active substance sulfamethoxazole has been mentioned on the CoS. Stability data on the active substance trimethoprim have been provided in accordance with applicable European guidelines, confirming a retest period of 60 months.

Stability data on the finished products have been provided in accordance with applicable European guidelines, demonstrating the stability of the product throughout the claimed shelf life of 36 months without any special storage conditions.

Additional stability studies justify the claimed 12 months in-use shelf-life of the product after opening and the claimed in-use shelf-life of the medicated drinking water of 24 hours, without any special storage conditions.

### **H. Genetically Modified Organisms**

None

### **J. Other Information**

None

## **III. SAFETY AND RESIDUES ASSESSMENT (PHARMACO-TOXICOLOGICAL)**

As this is a generic application according to Article 13, and bioequivalence with the reference product has been demonstrated, results of pharmacological, toxicological, user safety and residues tests were not required. These aspects are identical to the reference product.

Warnings and precautions as listed on the product literature are the same as those of the reference product and are adequate to ensure safety of the product to users / the environment / consumers.

### **User Safety**

Warnings and precautions as listed on the product literature are adequate to ensure safety to users of the product.

### **Ecotoxicity**

The applicant provided a first and second phase environmental risk assessment in compliance with the relevant guideline which showed that the product will not pose an unacceptable risk for the environment when used in accordance with the SPC. Therefore, no warnings regarding ecotoxicity are required.

### **III.B Residues documentation**

#### **Residue Studies**

No residue depletion studies were conducted because bioequivalence with the reference product has been demonstrated.

### ***Withdrawal Periods***

The withdrawal periods are the same as stated in the reference product:

#### Meat and offal:

Pigs: 5 days

Broilers: 6 days

#### Eggs:

Not authorised for use in laying birds producing eggs for human consumption.

## **IV. CLINICAL ASSESSMENT (EFFICACY)**

As this is a generic application according to Article 13, and bioequivalence with a reference product has been demonstrated, efficacy studies are not required. The efficacy claims for this product are equivalent to those of the reference product.

### ***Resistance***

Adequate warnings and precautions appear on the product literature.

## **V. OVERALL CONCLUSION AND BENEFIT– RISK ASSESSMENT**

The data submitted in the dossier demonstrate that when the product is used in accordance with the Summary of Product Characteristics, the risk benefit profile for the target species is favourable and the quality and safety of the product for humans and the environment is acceptable.