

## **SUMMARY OF PRODUCT CHARACTERISTICS**

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

Mamyzin 269.5 mg/ml Powder and Solvent for Suspension for Injection for cattle.

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

Each 5g vial contains:  
Penethamate hydriodide 5 million IU

Each 10g vial contains:  
Penethamate hydriodide 10 million IU

Each 15ml and 30ml vial of solvent contains:  
methyl parahydroxybenzoate, as preservative 1.5mg/ml

Each ml of the reconstituted product contains 269.5 mg of penethamate hydriodide.

For the full list of excipients, see section 6.1

### **3. PHARMACEUTICAL FORM**

Powder and solvent for suspension for injection  
Powder vial: White to off-white crystalline powder  
Solvent vial: Clear solution

### **4. CLINICAL PARTICULARS**

#### **4.1 Target Species**

Cattle, dairy

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

Bovine mastitis caused by penicillin sensitive organisms.

#### **4.3 Contraindications**

Do not use in animals known to be hypersensitive to penicillin.  
Do not administer by intravenous injection.

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

None.

## **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. If this is not possible, therapy should be based on local (regional, farm level) epidemiological information about susceptibility of the target bacteria.

Official, national and regional 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 benzylpenicillin and may decrease the effectiveness of treatment with other beta-lactams due to the potential for cross-resistance.

### Special Precautions to be taken by the person administering the medicinal product to animals

Penicillins and cephalosporins may cause hypersensitivity (allergy) following injection, inhalation, ingestion or skin contact. Hypersensitivity to penicillins may lead to cross-reactions to cephalosporins and vice versa. Allergic reactions to these substances may occasionally be serious.

1. Do not handle this product if you know you are sensitised, or if you have been advised not to work with such preparations.
2. Handle the product with great care to avoid exposure, taking all recommended precautions.
3. If you develop symptoms following exposure such as a skin rash, you should seek medical advice and show the Doctor this warning. Swelling of the face, lips or eyes or difficulty breathing are more serious symptoms and require urgent medical attention.

Wash hands after use.

In the event of self-injection, seek medical advice.

## **4.6 Adverse reactions (frequency and seriousness)**

In very rare cases anaphylactic shock may occur, which can be fatal.

## **4.7 Use during pregnancy, lactation or lay**

Can be used during pregnancy.

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

Penicillins should not be administered concurrently with bacteriostatic antibiotics.

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

**Reconstitution:** Reconstitute the suspension using the entire contents of the 5g vial with the 15ml vial of diluent OR the 10g vial with the 30 ml vial of diluent provided.

**Use only 5g vial with 15ml diluent and 10g vial with 30ml diluent to provide the correct dose.**

Shake well after reconstitution.

**Dosage:** The daily dose is 15 mg penethamate hydriodide per kg bodyweight for 3 consecutive days. This is equivalent to 5.5 ml of the reconstituted suspension per 100 kg bodyweight.  
Shake well before administration.

For intramuscular use. Do not administer intravenously.

To ensure a correct dosage, bodyweight should be determined as accurately as possible to avoid under-dosing.

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

Penicillins have a very wide margin of safety.

#### 4.11 Withdrawal period(s)

Cattle meat and offal: 7 days

Cattle milk: 96 hours

### 5 PHARMACOLOGICAL PROPERTIES

ATC Vet Code : QJ01CE90 : Beta lactamase sensitive penicillins.

#### 5.1 Pharmacodynamic properties

Its mode of action is by prevention of cell wall synthesis during bacterial cell growth and is primarily bactericidal. The in-vitro spectrum of activity is mainly within the gram-positive class of bacteria eg *Staphylococcus* spp, *Streptococcus* spp, *Clostridium* spp, *Bacillus* spp etc.

#### 5.2 Pharmacokinetic properties

Penethamate hydriodide is a prodrug which releases benzylpenicillin quantitatively at hydrolysis. The pKa-value of penethamate hydriodide is 8.4. This means that in aqueous solution at physiological pH of 7.2, 8.2% of the drug will be present as the uncharged molecule while 91.8% will be present as the ion. In aqueous solution penethamate is hydrolysed to form benzylpenicillin and diethylaminoethanol. After intramuscular injection the prodrug itself as well

as the released alcohol, diethylaminoethanol has not shown any unexpected pharmacological effects.

## **6. PHARMACEUTICAL PARTICULARS**

### **6.1 List of excipients**

Methyl parahydroxybenzoate  
Water for injections  
Egg lecithin  
Sodium citrate anhydrous  
Polysorbate 81

### **6.2 Incompatibilities**

None known.

### **6.3 Shelf life**

Shelf life of the veterinary medicinal product as packaged for sale: 3 years.  
Shelf life after reconstitution according to directions: Use immediately.

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

Do not store above 25°C.  
Discard unused suspension.  
Keep the container in the outer carton.

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

Colourless, Type I Ph Eur glass vials, closed with butyl rubber stoppers and metal caps containing either 5 or 10 g of penethamate hydriodide and 15 or 30 ml solvent to produce a reconstituted suspension.

Pack sizes:

10g vials and 30ml solvent x 10

5g vials and 15ml solvent x 10

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 material derived from such veterinary medicinal products should be disposed of in accordance with local requirements.

**7. MARKETING AUTHORISATION HOLDER**

Boehringer Ingelheim Animal Health UK Ltd  
Ellesfield Avenue  
Bracknell  
Berkshire  
RG12 8YS

**8. MARKETING AUTHORISATION NUMBER**

Vm 08327/4298

**9. DATE OF FIRST AUTHORISATION**

15 March 2000

**10. DATE OF REVISION OF THE TEXT**

November 2018

**PROHIBITION OF SALE; SUPPLY AND/OR USE**

Conditions or restrictions regarding supply and use: Veterinary medicinal product subject to prescription.

Administration conditions: Administration under veterinary control or supervision.

Approved: 09 November 2018

