

# MINOXEL PLUS

Ceftiofur hydrochloride in sterile suspension

**REG. SAGARPA Q-2083-073**



## FORMULA

Each ml contains:

Ceftiofur (As hydrochloride) 50 mg

Vehicle c.b.p. 1 mL

## PRESENTATIONS

Bottles with 100 and 250 mL.

## DESCRIPTION

Minoxel Plus contains ceftiofur hydrochloride, a broad-spectrum antibiotic belonging to the cephalosporin family. It is active against gram-positive and gram-negative bacteria, including  $\beta$ -lactamase-producing strains. Like other cephalosporins, ceftiofur is bactericidal as a result of the inhibition of cell wall synthesis.

The chemical name of Ceftiofur hydrochloride is: 5-Thia-1-azabicyclo [4.2.0] oct-2-ene-2-carboxylic acid, 7 - [[[(2-amino-4-thiazolyl) (methoxyimino) - acetyl] amino] -3 - [[[(2-furanylcarbonyl) thio] methyl] -8-oxo-, hydrochloride salt, [6R- [6 $\alpha$ , 7 $\beta$  (Z)]] -.

## INDICATIONS

**Bovines:** Minoxel Plus is indicated in the treatment of bovine respiratory disease (boarding fever or pneumonia) associated with *Pasteurella haemolytica*, *Pasteurella multocida* and *Haemophilus somnus*. It is also indicated in the treatment and control of cattle with acute interdigital necrobacillosis (gabarro) in which the agents *Fusobacterium necrophorum* and / or *Bacteroides melanogenicus* are involved.

**Swine:** Minoxel Plus is indicated in the treatment and control of porcine bacterial respiratory disease (porcine bacterial pneumonia) associated with *Actinobacillus* (*Haemophilus*) *pleuropneumoniae*, *Pasteurella multocida*, *Salmonella choleraesuis* and *Streptococcus suis*.

## DOSE

**Cattle:** Administer the cattle at a dose of 1 to 2 mg of ceftiofur per kilogram of live weight (1 to 2 mL of the suspension per 50 kg of live weight). The treatment must be repeated at 24-hour intervals for three consecutive days. Animals that show no signs of improvement after three treatments can be re-treated on days 4 and 5.

**Swine:** Administer the pigs at a dose of 1 to 3 mg of ceftiofur per kilogram of live weight (1 to 3 mL of the suspension for every 50 kg of live weight). The treatment must be repeated at 24-hour intervals for three consecutive days. Animals that show no signs of improvement after three treatments can be re-treated on days 4 and 5.

## ROUTE OF ADMINISTRATION

Cattle: intramuscular and subcutaneous.

Swine: intramuscular.

## CLINICAL MICROBIOLOGY

Cattle: ceftiofur has demonstrated activity in vitro and in vivo against *Pasteurella haemolytica*, *Pasteurella multocida* and *Haemophilus somnus*, three of the main pathogenic bacteria associated with bovine respiratory disease (pneumonia or shipping fever).

This antibiotic has also demonstrated in vitro activity against *Corynebacterium pyogenes*, another bacterial pathogen associated with bovine respiratory disease. However, the clinical significance of this in vitro activity is not known.

Swine: ceftiofur has demonstrated activity in vitro and in vivo against gram-negative pathogens such as *Actinobacillus* (*Haemophilus*) *pleuropneumoniae*, *Salmonella choleraesuis*, *Pasteurella multocida* and the gram-positive pathogen *Streptococcus suis*. All these, individually or jointly, can be associated with the swine bacterial respiratory disease (porcine bacterial pneumonia).

## WITHDRAWAL TIME

Milk withdrawal times: 0 days.

Meat withdrawal times: do not consume the meat of treated animals until 48 hours after the last application.

## **WARNINGS**

Penicillins and cephalosporins can cause hypersensitivity in humans (allergies) through injection, inhalation, ingestion or contact with the skin. Hypersensitivity to penicillins can cause cross-sensitivity to cephalosporins and vice versa. Allergic reactions to these substances can be serious.

Do not handle this product if you know that you are sensitized or if you have been advised not to work with this type of product.

Handle this product with great care, taking all precautions to avoid coming into contact with it.

If after exposure to the product you begin to present signs such as itchy skin, you should seek immediate medical attention and show the doctor this warning.

Inflammation of the face, lips or eyes, or difficulty breathing are more serious signs that require urgent medical attention.

Do not administer to animals with hypersensitivity to cephalosporins or other beta-lactam antibiotics.

## **PHARMACEUTICAL PRECAUTIONS**

Shake the product well before use.

The product must be consumed completely within 14 days after the first dose is extracted.

Keep out of reach of children.

CONSULT THE VETERINARY PHYSICIAN