

DOTFLOX

(Ciprofloxacin Lactate 40mg Injection for Veterinary Use)

Description

Ciprofloxacin Lactate is a synthetic broad-spectrum fluoroquinolone antibiotic that acts by inhibiting bacterial DNA gyrase and topoisomerase IV, essential for DNA replication and cell division. It provides potent bactericidal action against a wide range of Gram-negative and Gram-positive bacteria. The formulation includes Benzyl Alcohol as a preservative to ensure sterility and extend shelf life.

Specification

- **Active Ingredient:** Ciprofloxacin Lactate 40 mg/mL
- **Preservative:** Benzyl Alcohol I.P. 1.5% v/v
- **Appearance:** Clear, colourless to pale yellow sterile solution
- **pH Range:** 3.5 – 4.5
- **Sterility:** Sterile and pyrogen-free
- **Packaging:** Amber glass vials, typically 30 mL, 100 mL

Composition

- **Ciprofloxacin Lactate I.P.:** 40 mg per mL
- **Benzyl Alcohol I.P.:** 1.5% v/v (Preservative)
- **Excipients:** Buffering agents, sterile water for injection

Category

- Antibacterial
- Fluoroquinolone antibiotic
- Bactericidal veterinary preparation

Indications

- Treatment of bacterial infections in cattle, goats, sheep, pigs, poultry, and companion animals
- Respiratory tract infections
- Gastrointestinal infections
- Urinary tract infections
- Septicaemia
- Skin and soft tissue infections

Dosage and Administration

- **Dose:**
 - **Large animals (Cattle, buffalo):** 2–4 mg/kg body weight once daily
 - **Small animals (Dogs, cats):** 5–10 mg/kg body weight once daily
 - **Poultry:** 10 mg/kg body weight via drinking water
- **Route:** Intramuscular (IM) or slow intravenous (IV) injection
- **Frequency:** Once daily for 3–5 days or as advised by a veterinarian

Product Form

- Sterile injectable solution
- Concentration: Ciprofloxacin Lactate 40 mg/mL
- Pack Sizes: 30 mL, 100 mL glass vials

Usage Instructions

- Use sterile syringe and aseptic handling
- Do not mix with other injections in the same syringe
- Shake gently before use
- Observe animal post-administration for any reactions

Advantages

- Rapid and powerful bactericidal action/ Broad-spectrum coverage across species
- High tissue penetration and bioavailability/ Lower dosage required due to potent efficacy
- Effective against multi-drug-resistant organisms

Adverse Effects

- Pain or swelling at injection site
- Nausea or vomiting (rare in small animals)
- Risk of cartilage damage in growing animals
- CNS stimulation in susceptible animals (seizure risk)
- Hypersensitivity reactions (rare)

Withdrawal Period

- **Meat:** 14 days
- **Milk:** 5 days (120 hours)
- **Eggs:** 7 days (for poultry)

Always follow national regulations and veterinary advice

Storage Conditions

- Store below 25°C
- Do not freeze
- Protect from direct sunlight
- Keep container tightly closed after opening

Handling Precautions

- Use gloves and aseptic techniques
- Avoid contact with eyes, skin, or mucous membranes
- Wash hands thoroughly after use
- Dispose of unused product safely

HS and HSN Code

- **HS Code:** 3004.20 (Antibiotic formulations)
- **HSN Code (India):** 3004.20.99

Special Instructions

- For veterinary use only
- Do not use in animals with known hypersensitivity to fluoroquinolones
- Avoid in animals under 1 year old (risk of joint cartilage erosion)
- Use with caution in animals with seizure disorders

Details of Human and Veterinary Application

- **Veterinary Use:** Commonly used for bacterial infections in livestock and pets
- **Human Use:** Ciprofloxacin is widely used in humans but this formulation is **strictly veterinary** due to different excipients and dosage

Frequently Asked Questions (FAQs)

Q1: What is Ciprofloxacin Lactate?

A: A broad-spectrum fluoroquinolone antibiotic used to treat bacterial infections in animals.

Q2: Why is Benzyl Alcohol added?

A: It acts as a preservative to keep the injection sterile and stable.

Q3: Is this safe for puppies or young animals?

A: Use with caution — fluoroquinolones can damage cartilage in young animals.

Q4: Can I mix this with other injections?

A: No, it should be administered separately.

Q5: What is the withdrawal period?

A: 14 days for meat, 5 days for milk, 7 days for eggs (for poultry).