

LEVODOT

Levofloxacin Hemihydrate I.P. 10% w/w equivalent to Levofloxacin Water Soluble Veterinary Oral Powder

Description

Levofloxacin Hemihydrate I.P. 10% w/w veterinary oral powder is a broad-spectrum fluoroquinolone antibiotic formulated for effective control and treatment of bacterial infections in livestock and poultry. It provides **10% w/w equivalent of Levofloxacin**, a synthetic antibacterial agent with excellent bioavailability and water solubility, making it ideal for administration via drinking water or feed.

Specification

- **Appearance:** Fine, pale yellow to light cream, free-flowing powder
- **Identification:** Complies with I.P. standards for Levofloxacin Hemihydrate using HPLC and UV spectrophotometry
- **Assay:** 10% w/w Levofloxacin content equivalent (from Levofloxacin Hemihydrate)
- **Water Solubility:** Freely soluble in water
- **Loss on Drying:** Not more than 5.0%
- **pH (1% aqueous solution):** 4.0 to 6.0
- **Microbial Load:** Compliant with veterinary pharmacopeial standards
- **Heavy Metals:** Within acceptable I.P. limits
- **Uniformity:** Uniform drug distribution throughout the batch
- **Shelf Life:** Minimum 24 months under recommended storage conditions

Indications

Levofloxacin 10% w/w oral powder is indicated for the treatment of bacterial infections in poultry and livestock including:

- Respiratory tract infections (e.g., CRD, pneumonia, bronchitis)
- Gastrointestinal infections (e.g., colibacillosis, salmonellosis)
- Septicaemia and systemic bacterial infections
- Skin and soft tissue infections/ Mixed bacterial infections caused by Levofloxacin-sensitive organisms
- Post-operative infections

Dosage and Route of Administration

- **Route:** Oral, via drinking water or mixed in feed
- **Poultry:** 1 gm per 1–2 litres of drinking water or 1 kg of feed, for 3–5 consecutive days
- **Livestock:** 10–20 mg per kg body weight per day, for 3–5 days
- Dosage may vary depending on species, severity of infection, and veterinarian guidance

Product Form

- Veterinary Oral Powder
- Available pack sizes: **50 gm, 100 gm, 500 gm, 1 kg, 5 kg**
- Water-soluble formulation, easy to administer via water or feed
- Resealable, moisture-protected packaging for ease of use

Usage and Advantages

- Broad-spectrum antibacterial action with rapid onset
- Highly bioavailable and water-soluble for fast absorption
- Effective at low doses with fewer administrations
- Active against resistant strains of *E. coli*, *Salmonella*, *Pasteurella*, and *Mycoplasma*
- Minimal impact on feed intake
- Suitable for both preventive and curative purposes in mass medication programs
- Improves animal health, reduces mortality, and boosts performance

Adverse Effects

- Generally well-tolerated in target species
- Rare cases of mild gastrointestinal disturbances (e.g., diarrhoea)
- Prolonged or high-dose use may cause articular cartilage damage in young animals
- Avoid concurrent use with non-steroidal anti-inflammatory drugs (NSAIDs) to prevent neurotoxicity
- Hypersensitivity reactions are rare but possible
- Discontinue use immediately if abnormal signs appear and consult a veterinarian

Withdrawal Period

- **Meat:** Minimum 7 days from the last treatment
- **Milk:** Minimum 3 days (if used in lactating animals)
- **Eggs:** Not recommended for use in laying hens producing eggs for human consumption
- Always follow national regulatory guidelines and label instructions

Storage and Handling

- Store in a cool, dry place below 30°C
- Protect from moisture, heat, and direct sunlight
- Keep container tightly closed after each use
- Wear gloves and mask while handling powder
- Do not reuse empty containers
- Keep out of reach of children and unauthorized personnel

HS and HSN Code

- **HS Code:** 2941.60 — Quinolone-based antibiotics
- **HSN Code (India):** 2941 — Antibiotics and antibacterial drugs for veterinary use

Precautions and Special Instructions

- Use only as prescribed by a registered veterinarian
- Do not exceed the recommended dosage
- Not to be used in animals with hypersensitivity to fluoroquinolones
- Avoid in animals intended for breeding unless advised
- Do not administer concurrently with other fluoroquinolones or antacids containing magnesium/aluminium
- Ensure clean water/feed mixing to achieve uniform dosage
- Rotate antibiotics periodically to prevent resistance development
- Maintain proper records of use, especially in food-producing animals

Details of Human and Veterinary Application

- **For Veterinary Use Only**
- Levofloxacin is a potent antimicrobial agent classified under veterinary fluoroquinolones
- Not to be handled without proper protection; avoid inhalation or skin contact
- In case of accidental exposure, seek medical advice immediately
- Observe withdrawal periods to ensure food safety and residue-free meat, milk, or eggs

Frequently Asked Questions (FAQs)

Q: What is Levofloxacin Hemihydrate (LVX)?

A: Levofloxacin Hemihydrate (LVX) is a fluoroquinolone antibiotic used in veterinary medicine to treat a wide range of bacterial infections by inhibiting bacterial DNA replication enzymes.

Q: Which animals can this product be used for?

A: It is suitable for poultry (broilers, breeders) and livestock including cattle, goats, sheep, and pigs, as prescribed by a veterinarian.

Q: How is it administered?

A: Orally, through feed or drinking water, once daily for 3–5 days based on species and severity.

Q: Are there any side effects?

A: Very rare. May include mild gastrointestinal signs or, in young animals, joint-related effects if used excessively.

Q: Can this product be used in laying hens?

A: Not recommended for birds producing eggs for human consumption due to possible residue risk.

Q: What is the withdrawal period?

A: At least 7 days for meat and 3 days for milk after last treatment. Always confirm with local regulations.

Q: How should the powder be stored?

A: Store below 30°C in a dry, shaded place. Keep sealed when not in use and avoid contamination.