

DOTMISOLE

Levamisole Hydrochloride I.P. 30% w/w Veterinary Oral Powder

Description

Levamisole Hydrochloride I.P. 30% w/w veterinary oral powder is a potent **broad-spectrum anthelmintic** formulation designed for oral administration to livestock and poultry. Levamisole belongs to the **imidazothiazole class of antiparasitic agents**, known for its effectiveness against both mature and immature stages of **gastrointestinal and pulmonary nematodes** (roundworms).

This water-soluble powder acts as a **nicotinic acetylcholine receptor agonist**, causing spastic paralysis in nematodes, leading to their expulsion from the body. It also exhibits immunomodulatory effects, making it useful in disease resistance management.

Specification

- **Appearance:** Fine, white to off-white free-flowing powder
- **Identification:** Confirms to I.P. specifications for Levamisole Hydrochloride using titration and HPLC methods
- **Assay:** 30% w/w Levamisole Hydrochloride I.P.
- **Solubility:** Freely soluble in water
- **Loss on Drying:** Not more than 5.0%
- **pH (1% aqueous solution):** Between 4.5 and 6.5
- **Microbial Load:** Complies with veterinary pharmacopeial microbial standards
- **Heavy Metals:** Within acceptable I.P. limits
- **Uniformity:** Homogeneous distribution of drug in all dosage sizes
- **Shelf Life:** Minimum 24 months under recommended storage conditions

Indications

Levamisole 30% w/w oral powder is indicated for the treatment and control of gastrointestinal and pulmonary nematode infestations in livestock and poultry, including:

- *Ascaridia spp.*
- *Haemonchus contortus*
- *Trichostrongylus spp.*
- *Ostertagia spp.*
- *Oesophagostomum spp.*
- *Bunostomum spp.*
- *Nematodirus spp.*
- *Dictyocaulus spp.* (lungworms)

Dosage and Route of Administration

- **Route:** Oral, via feed or drinking water
- **Poultry:** 20 mg Levamisole HCl per kg body weight (approx. 0.067 g of 30% powder per kg BW)
- **Cattle, Sheep, Goats, Pigs:** 7.5 mg Levamisole HCl per kg body weight (approx. 0.025 g of 30% powder per kg BW)
- **Administration Frequency:** Single dose, repeat as per veterinarian's guidance or routine deworming schedule
- Ensure uniform distribution when mixing with feed or water

Product Form

- Veterinary oral powder
- Pack sizes: **100 gm, 250 gm, 500 gm, 1 kg, 5 kg**
- Easy-to-mix, water-soluble formulation for practical field use

Usage and Advantages

- Highly effective against a broad spectrum of nematodes
- Acts quickly by causing paralysis and expulsion of worms
- Boosts immune response due to immunostimulant properties
- Ideal for mass deworming programs
- Safe for use in food-producing animals when used as directed

Adverse Effects

- Rare and generally mild at therapeutic doses
- Possible transient side effects include salivation, excitement, or mild gastrointestinal upset
- Overdosage may lead to cholinergic symptoms (e.g., muscle tremors, convulsions)
- Toxicity more likely in debilitated or undernourished animals
- Stop treatment and consult a veterinarian if adverse reactions are observed

Withdrawal Period

- **Meat:** Minimum 7 days after last dose
- **Milk:** Minimum 3 days in lactating animals
- Always adhere to regulatory withdrawal periods to avoid drug residues in animal-derived food products

Storage and Handling

- Store below 30°C in a cool, dry, well-ventilated area
- Protect from direct sunlight and moisture
- Keep container tightly sealed when not in use
- Wear gloves and avoid inhalation or contact with eyes/skin during handling
- Do not reuse empty containers
- Keep out of reach of children and unauthorized personnel

HS and HSN Code

- **HS Code:** 2934.99 — Other heterocyclic compounds
- **HSN Code (India):** 2934 — Anthelmintics and veterinary parasiticides

Precautions and Special Instructions

- Use only under veterinary supervision
- Do not exceed recommended dosage
- Avoid use in severely debilitated or stressed animals
- Not recommended for animals under 4 weeks of age unless prescribed
- Rotate with other classes of anthelmintics to prevent resistance

Details of Human and Veterinary Application

- **For Veterinary Use Only**
- Not for human use or consumption
- Levamisole is restricted to veterinary applications and must be handled with care
- Avoid contact with skin, eyes, or mucous membranes
- In case of accidental ingestion or exposure, seek immediate medical advice
- Strictly observe the withdrawal period to maintain food safety standards

Frequently Asked Questions (FAQs)

Q: What is Levamisole Hydrochloride (LVH)?

A: Levamisole Hydrochloride (LVH) is a synthetic anthelmintic drug used in veterinary medicine to treat infections caused by gastrointestinal and lungworms in various animal species.

Q: How does Levamisole work?

A: It stimulates nicotinic receptors in parasites, causing muscle paralysis and expulsion through the intestines. It also has mild immunostimulant effects in animals.

Q: What types of animals can this be used for?

A: It is safe and effective in poultry, cattle, sheep, goats, and pigs when used at prescribed doses.

Q: Can I mix this powder in drinking water?

A: Yes. It is water-soluble and can be safely administered via drinking water or feed, ensuring accurate dosing.

Q: What is the withdrawal period for food-producing animals?

A: At least 7 days for meat and 3 days for milk. Always check and follow local regulatory guidelines.

Q: Are there any side effects?

A: Side effects are rare and usually mild. Overdose may cause cholinergic symptoms such as muscle tremors or hypersalivation.

Q: How should this product be stored?

A: Store in a dry place below 30°C, away from direct sunlight and moisture. Always reseal the container after use.