Gallifen®
200 mg fenbendazole/ml
Suspension for use in drinking water for chickens

Easy deworming
INTRODUCTION

Origin of the molecule

Fenbendazole is an anthelmintic belonging to the benzimidazole-carbamate group. The benzimidazoles were introduced into the animal health market primarily for the control of gastrointestinal nematodes. Their use quickly became widespread because they offered major advantages over previous medications in terms of:

- spectrum
- efficacy against immature stages
- safety for the host animal

They did not cause a setback due to drug toxicity and it was possible to demonstrate the economic advantage of strategic treatment, even under conditions of mild parasitism.

Activity

Fenbendazole has a very broad spectrum anthelmintic activity against most prevalent worm infections:

- *Ascaridia galli*: the large roundworm is the most common and damaging worm.
- *Heterakis gallinarum* is a small roundworm that also plays a crucial role in the spread of the blackhead parasite *Histomonas*.

Pharmacodynamics

Fenbendazole acts by binding to beta-tubulin, thereby inhibiting the polymerisation of tubulin to microtubules and subsequently interfering with energy metabolism. The molecule is effective at killing all adult, larval stages and eggs of worm parasites.

Resistance

Resistance to fenbendazole is not widespread nor viewed to be a major problem.

Indications for use

Chickens

Gallifen® 200 mg fenbendazole/ml suspension for use in drinking water for chickens is indicated for the treatment of chickens infected with *Ascaridia galli* and *Heterakis gallinarum*.

Formulation: Nanosuspension

Gallifen® 200 mg/ml suspension is developed by an innovative nanosuspension technology, ensuring all particles have a very small particle size in the nanometer range.

Benefits

- Efficacy
  - Homogenous suspension
  - Independent of water quality
  - In different kinds of administration systems for water medication
  - Higher bio-availability and stability

- Safety
  - No sedimentation
  - No obstructions
  - No risk of residues in pipelines

- Convenience
  - No additional steps needed
  - Very short preparation time

Gallifen® nanosuspension

Other suspensions

Disadvantages

- Predilution step
- Additional stirring
**WORM INFECTIONS IN POULTRY**

- **Profit eaters**
  - Often subclinical infection
  - Egg production and hatchability ↘
  - Body weight gain ↘ and feed conversion rate ↗
  - Reduced immune response
  - Poor condition

- **Persistent re-infection**
  - Fast and massive excretion of sticky eggs
  - Eggs survive for more than 5 years in environment

- **High infection rate in layers, breeders and pullets**

- **Faecal-oral infection route**

**Breeder systems - barn egg production**

**Pullets**

**Cage free housed laying hens**

Aviary systems - barn egg production

Free range - Organic husbandry
Most prevalent worms

Direct life cycle without intermediate host

Diagnosis
- Necroscopy
- Coproscopy

Ascaridia galli – Large roundworm

Prepatent period: 6 weeks
Adult stadia of 4-5 cm in small intestines

Heterakis gallinarum – Small roundworm

Prepatent period: 4 weeks
Adult stadia of 7-15 mm in caeca
Vector for Histomonas meleagridis (Blackhead disease)
Fig.: Efficacy of a treatment with Gallifen® 200 mg/ml oral suspension against natural co-infections of Ascaridia galli and Heterakis gallinarum in layer chickens. Gallifen® was administered at 1 mg fenbendazole/kg bodyweight/day for 5 consecutive days. 5 Days after treatment, the total number of adult worms in treated layers were compared to an untreated control group (both groups: n=30). Internal data.

**Deworming strategy:**
- Repeated treatments every 6 weeks
- Significant reduction of infection pressure
- Benefits
  1. Improved technical performances
  2. Improved general health status
  3. Reduction of transmission of other diseases
     - Histomonas meleagridis
     - Salmonella
     - Viruses

Fig.: Deworming strategy
**Gallifen® 200 mg/ml suspension**

**Product specifications**
- 1 ml contains 200 mg fenbendazole
- White to almost white suspension

**Dosing**
- For use in drinking water
- In medication tanks and dosing pumps
- Stir until visibly homogenous
- No further stirring during administration is necessary

<table>
<thead>
<tr>
<th>Fenbendazole/ kg bodyweight</th>
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<tbody>
<tr>
<td><strong>Daily dose</strong></td>
</tr>
<tr>
<td>1 mg</td>
</tr>
<tr>
<td>for 5 consecutive days</td>
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<tr>
<td><strong>Total dose</strong></td>
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<tr>
<td>5 mg</td>
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**Gallifen® oral suspension/ 1000 kg bodyweight**

<table>
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<tr>
<td><strong>Daily dose</strong></td>
</tr>
<tr>
<td>5 ml</td>
</tr>
<tr>
<td>for 5 consecutive days</td>
</tr>
<tr>
<td><strong>Total dose</strong></td>
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<tr>
<td>25 ml</td>
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**Strategic deworming**
Every 6 weeks

**Withdrawal period**
- Eggs: 0 days
- Meat and offal: 6 days

**Shelf life and storage**
- Shelf life of the veterinary medicinal product as packaged for sale: 30 months.
- Shelf life after first opening the immediate packaging: 3 months.
- Shelf life of the medicated drinking water: 24 hours.

Protect product as packed for sale and after first opening from frost. Do not freeze medicated water.

**Overdose**
No adverse reactions have been observed at up to 5-fold overdose in broilers (aged approximately 8 weeks). No adverse reactions have been observed at up to 3-fold overdose in layers and breeders.

**Packaging**
White cylindrical High Density Polyethylene (HDPE) bottle with white polypropylene (PP) screw tamper-evident closure of 125 ml and 1 litre; white rectangular HDPE bottle of 1 litre with vertically see-through bar with an LDPE insert closed with white PP tamper-evident screw cap with a LDPE sealing disk. White HDPE canisters with white HDPE ribbed tamper-evident screw cap of 2.5 litres and 5 litres.

- *Used references can be obtained upon demand.
- *Gallifen® suspension brochure follows the authorized EU SPC (available on request).
- *Indications listed above are not necessarily authorized in all countries.
- *Please consult the local label for exact indications and posology.
- *Use medicines responsibly.
- *POM-V
- *VM 30382/4037