

# Summary of Product Characteristics

## 1 NAME OF THE VETERINARY MEDICINAL PRODUCT

Fenbenor 2.5% w/v Oral Drench.

## 2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

### Active substance

Fenbendazole 25.0 mg

### Excipients

Methyl Parahydroxybenzoate (E218) 2.0 mg

Propyl Parahydroxybenzoate (E216) 0.2 mg

Sodium Metabisulphite 1.0 mg

For a full list of excipients see section 6.1.

## 3 PHARMACEUTICAL FORM

Oral suspension. A white to off-white suspension.

## 4 CLINICAL PARTICULARS

### 4.1 Target Species

Sheep.

### 4.2 Indications for use, specifying the target species

Fenbenor 2.5% w/v Drench is a broad spectrum anthelmintic for control of benzimidazole susceptible mature and developing immature forms of the following nematodes of the gastrointestinal and respiratory tracts of sheep.

For the treatment of sheep infected with:

*Haemonchus spp.*

*Ostertagia spp.*

*Trichostrongylus spp.*

*Cooperia spp.*

*Nematodirus spp.*

*Bunostomum spp.*

*Trichuris spp.*

*Strongyloides spp.*

*Oesophagostomum spp.*

*Dictyocaulus spp.*

*Moniezia spp.*

### 4.3 Contraindications

Do not use in animals with known hypersensitivity to the active ingredient.

### 4.4 Special warnings for each target species

When dosing sheep, care must be taken not to damage the mouth or pharyngeal region with drenching equipment. As with other anthelmintics, veterinary advice should be sought on appropriate dosing programmes and stock management to achieve adequate parasite control and reduce the likelihood of anthelmintic resistance developing. If the product does not achieve the desired clinical effect, other diseases, nutritional disturbances or anthelmintic resistance may be involved.

### 4.5 Special precautions for use

#### Special precautions for use in animals

None.

#### Special precautions to be taken by the person administering the veterinary medicinal product to animals

Estimate bodyweight carefully.  
Use only properly calibrated dosing equipment.

### 4.6 Adverse reactions (frequency and seriousness)

None known.

### 4.7 Use during pregnancy, lactation or lay

Sheep have been reported to be sensitive to benzimidazoles during the first quarter of gestation.

### 4.8 Interaction with other medicinal products and other forms of interaction

None known.

### 4.9 Amounts to be administered and administration route

For oral administration in sheep.  
Shake well before use.  
The recommended treatment dose is 5 mg Fenbendazole per kg bodyweight.  
Practical dosage recommendations are as follows:

Bodyweight (kg)	Dose (ml)	Number of doses per pack
10	2.0	500
50	10.0	100

### 4.10 Overdose (symptoms, emergency procedures, antidotes), if necessary

Not applicable.

### 4.11 Withdrawal Period(s)

Sheep must not be slaughtered for human consumption during treatment or for 28 days thereafter.  
This product should not be used in ewes producing milk for human consumption.

## 5 PHARMACOLOGICAL or IMMUNOLOGICAL PROPERTIES

Pharmacotherapeutic Group: Anthelmintic, fenbendazole,  
ATCvet Code: QP52AC13.

### Summary presentation of the active ingredient

Fenbendazole is an anthelmintic belonging to the benzimidazole group which acts by blocking fumarate reductase which results in the inhibition of the formation of adenosine triphosphate (involved in mitochondrial energy).

### 5.1 Pharmacodynamic properties

Fenbendazole, like many benzimidazoles, blocks fumarate reductase which results in the inhibition of the formation of adenosine triphosphate (involved in mitochondrial energy). There is also evidence that it inhibits glucose uptake and therefore increases glycogen utilization and depletes the worm's glycogen reserves. The overall effect of this action is to effectively starve the parasite to death. Furthermore this action results in the detachment of the parasites but in the case of intestinal helminths this detachment does not result in loss of contact with the drug whereas in the case of the liver fluke such detachment would reduce such contact. This probably explains its limited effect on the liver fluke and the good effect on intestinal helminths.

### 5.2 Pharmacokinetic properties

Fenbendazole is poorly soluble in water and consequently is poorly absorbed; something which is reflected in the relatively low plasma levels.

The scheme for the known metabolic pathways is given by Short, Flory, Hsieh and Barker (1988) together with the relative rates of breakdown in various species. The main breakdown products are the sulfoxide (oxfendazole) and sulphone.

## 6 PHARMACEUTICAL PARTICULARS

### 6.1 List of excipients

Polysorbate 80  
Sodium metabisulphite  
Methyl Parahydroxybenzoate (E218)  
Propyl Parahydroxybenzoate (E216)  
Sodium Citrate  
Citric Acid  
Simeticone emulsion  
Xanthan Gum  
Purified Water

### 6.2 Incompatibilities

None known.

### 6.3 Shelf-life

Shelf life of the veterinary medicinal product as packaged for sale: 3 years.

## **6.4 Special precautions for storage**

Do not store above 25°C.

Do not freeze.

## **6.5 Nature and composition of immediate packaging**

1 L (jerrican, flat bottom flexi), 2.5 L (jerrican, back pack), 5 L (jerrican) HDPE white rigid containers closed with a HDPP screw cap with a wood pulp PVDC liner.

Not all pack sizes may be marketed.

## **6.6 Special precautions for the disposal of unused veterinary medicinal products or waste materials**

Empty containers must be rinsed with water before disposal.

Dispose of used containers safely.

Do not contaminate ponds, waterways or ditches with product or used containers.

Unused product or waste material should be disposed of in accordance with current practice for pharmaceutical waste under national waste disposal regulations

## **7 MARKETING AUTHORISATION HOLDER**

Pharvet (Ireland) Ltd.,  
29 Cookstown Industrial Estate,  
Dublin 24,  
Ireland.

## **8 MARKETING AUTHORISATION NUMBER(S)**

VPA: 10462/002/002

## **9 DATE OF THE FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION**

3rd August 2007

## **10 DATE OF REVISION OF THE TEXT**

October 2012