**COMPOSITION**

<table>
<thead>
<tr>
<th>Content</th>
<th>Vetmulin® 20 g/kg Premix</th>
<th>Vetmulin® 100 g/kg Premix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiamulin hydrogen fumarate</td>
<td>20 g</td>
<td>100 g</td>
</tr>
<tr>
<td>Excipients</td>
<td>Up to 1 kg</td>
<td>Up to 1 kg</td>
</tr>
</tbody>
</table>

The product contains as excipients: Pregelatinised starch, wheat starch.

**PHARMACOLOGICAL ACTION**

Tiamulin hydrogen fumarate is a semi-synthetic derivative of the diterpene antibiotic pleuromutilin, produced by *Pleurotus mutilis*. Tiamulin is bacteriostatic and inhibits protein synthesis. The product has a strong affinity for the ribosome, causing an inhibition of peptidyltransferases. As a result protein synthesis is stopped. If response to treatment of Dysentery with the product is poor, then the possibility of resistance must be considered. Following oral administration, tiamulin hydrogen fumarate is rapidly absorbed from the gastrointestinal tract of pigs (85-90%) and appears in the blood within 30 minutes; There is very good distribution in the tissues with accumulation in lungs and in the colon. 30-50% of tiamulin is bound to serum proteins. Tiamulin is rapidly metabolised in the liver (hydroxylation, de-alkalysation, hydrolysis).

**INDICATIONS**

For treatment and prevention, when the disease is present at herd level, of Swine Dysentery caused by *Brachyspira hyodysenteriae* sensitive to tiamulin. The presence of disease in the herd should be established before use. The product can be used during pregnancy and lactation.

**CONTRAINDICATIONS**

Do not use in case of hypersensitivity to the active substances or any of the excipients.
Do not administer products containing ionophores such as monensin, salinomycin or narasin during or for at least seven days before or after treatment with the product.
Do not use the product in liquid feed.

**MODE OF ADMINISTRATION**

For oral administration only after incorporation in feed. To ensure a correct dosage body weight should be determined as accurately as possible to avoid underdosing.

**TARGET SPECIES**

Pigs.

**DOSAGE**

For the treatment and prevention, when disease is confirmed at the herd level, of swine dysentery: 8.8 mg tiamulin hydrogen fumarate (equivalent to 7.1 mg tiamulin base) per kg bodyweight per day for 7-10 consecutive days. Assuming a feed intake of 50 g/kg BW, this dose is obtained by mixing 8.8 kg of the Vetmulin 20 g/kg Premix per tonne of feed and 1.76 kg of Vetmulin® 100 g/kg Premix per ton of feed. In case of an altered feed intake (weight class, age, environment), adjust the incorporation rate in order to guarantee an intake of 8.8 mg.
tiamulin hydrogen fumarate (equivalent to 7.1 mg tiamulin base) per kg per day. The uptake of medicated feed depends on the clinical condition of the animals. In order to obtain the correct dosage the concentration of tiamulin should be adjusted using the following formula:

\[
\text{Kg premix/tonne} = \frac{\text{Dose rate (mg/kg) x mean body weight (kg)}}{\text{Mean feed intake (kg) x premix strength (g/kg)}}
\]

Medicated feed may be pelleted using a pre-conditioning step for 5 minutes at a temperature not exceeding 75°C.

**SIDE EFFECTS**

In rare cases, hypersensitivity to tiamulin following oral administration is reported in terms of acute dermatitis with cutaneous erythema and intense pruritus. The adverse reactions are usually mild and transient but in very rare cases may be serious. If these typical side effects occur, stop treatment immediately and clean animals and pens with water. Normally, affected animals recover quickly. Symptomatic treatment such as electrolyte therapy and an anti-inflammatory therapy may be useful.

**WITHDRAWAL PERIOD**

Meat and offal: 7 (seven) days.

**STORAGE**

Store below 25°C. Store in a dry place. Protect from direct sunlight. Store in the original container.

**PACKING**

The product is presented in a 5 kg and a 20 kg LDPE inner bag in an outer paper bag. The 100 g/kg formulation is also available in a 1 kg bag. Not all pack sizes may be marketed.

**WARNING**

Long term or repeated use should be avoided by improving management practice and thorough cleansing and disinfection. Avoid concurrent administration of tiamulin and the ionophore products monensin, narasin and salinomycin. People with known hypersensitivity to tiamulin should handle the product carefully. Tiamulin may lessen the antibacterial activity of beta-lactam antibiotics, whose action is dependent on bacterial growth. Inform the feed supplier that tiamulin will be used, to avoid incorporating the above listed products in the feed and to avoid contamination of the feed. If adverse effects occur due to an interaction, stop administration of the feed immediately. Direct contact with the skin, eyes and mucous membranes should be avoided by wearing overalls, impermeable rubber gloves and safety glasses when mixing or handling the product. In case of accidental eye contact, irrigate the eyes thoroughly with clean running water immediately. Seek medical advice if irritation persists. Accidental ingestion should be avoided. Wash hands after use. In case of accidental ingestion, seek medical advice immediately and show the package leaflet or label to the physician.