Proven efficacy and activity against key poultry mycoplasmas – *M. gallisepticum, M. synoviae* and *M. meleagridis*

Remains active against potentially resistant isolates to other antimicrobials, such as tyllosin, oxytetracycline and enrofloxacin

Shows in-vitro activity against a number of other key poultry pathogens

Compatible with chlorotetraycine to control complicated *Mycoplasma* infections (CCRD)

Convenient dosage form for water medication

Zero withdrawal period for eggs

Data Sheet Denagard® 12.5% Oral Solution

Contra-indications and warnings etc:

Birds must not be slaughtered for human consumption during treatment. Chickens may be slaughtered for human consumption after 2 days from the last treatment and turkeys 5 days from the last treatment. There is a 5-day withdrawal period for eggs.

Birds should not receive products containing monensin, narasin or salinomycin during or for at least seven days before or after treatment with tiamulin. Severe growth depression or death may result. Concurrent use of tiamulin and the ionophore anticoagulant maduramicin may lead to a mild to moderate growth depression in chickens. The situation is transient and resolution normally occurs within 3-5 days following withdrawal of tiamulin treatment. This does not seem to occur with the ionophore antibiotics lasalocid or semduramicin. In order to avoid interactions between tiamulin and the incompitable ionophores monensin, narasin and salinomycin, the feed mill supplying the birds should be notified that tiamulin will be used and that these ionophores should not be included in the feed and/or administered together. The birds should be tested for the ionophores prior to the use if there is any suspicion that contamination of the feed might occur. If an interaction does occur, stop tiamulin water medication immediately and replace with fresh water. Remove contaminated feed as soon as possible and replace with feed not containing the ionophores.

Do not use in animals hypersensitive to the active ingredient. For use in the drinking water of chickens and turkeys only. Monitor for growth depression or death. If any interaction occurs, stop tiamulin water medication immediately and replace with fresh water. Remove contaminated feed as soon as possible and replace with feed not containing the ionophores. Do not use in animals hypersensitive to the active ingredient. For use in the drinking water of chickens and turkeys only. Monitor for growth depression or death. If any interaction occurs, stop tiamulin water medication immediately and replace with fresh water. Remove contaminated feed as soon as possible and replace with feed not containing the ionophores.

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Reference:


The right choice – see the difference Denagard makes to your poultry...

and your profits.

For further information contact your veterinary surgeon or Pig & Poultry Division, Novartis Animal Health UK Ltd, New Cambridge House, Lillington, Near Royston, Hertfordshire SG8 0SS.

Tel: 01763 855000

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The right choice

Tiamulin® will be marketed as Denagard® through 2007 due to the globalisation of the Novartis® tiamulin brand.
The right choice – for *Mycoplasmal* infections in poultry

Producing healthy, productive poultry is now more challenging than ever so poultry farmers need a product they can trust, one that has proven efficacy against *M. gallisepticum*, *M. synoviae* and *M. meleagridis* and works fast, even against chlorotetracycline and tylosin resistant strains. Denagard 12.5% Oral Solution from Novartis can help deliver maximum performance since it offers increased growth rates and FCE in broilers and turkeys and increased egg production in layers together with a zero withdrawal period for eggs.

Denagard has been proven to be highly effective against key poultry *Mycoplasmas*

<table>
<thead>
<tr>
<th>Organism</th>
<th>No of isolates</th>
<th>MIC50 (µg/ml)</th>
<th>MIC90 (µg/ml)</th>
<th>Range (µg/ml)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>M. gallisepticum</em></td>
<td>20 isolates</td>
<td>0.001</td>
<td>0.025</td>
<td>0.0005-0.25</td>
</tr>
<tr>
<td><em>M. synoviae</em></td>
<td>28 isolates</td>
<td>0.1</td>
<td>0.25</td>
<td>0.05-0.5</td>
</tr>
<tr>
<td><em>M. meleagridis</em></td>
<td>11 isolates</td>
<td>–</td>
<td>–</td>
<td>0.025-3.13</td>
</tr>
<tr>
<td><em>B. pilosicoli</em></td>
<td>17</td>
<td>&lt;0.1</td>
<td>&lt;1.0</td>
<td>&lt;0.1-&lt;1.0</td>
</tr>
<tr>
<td><em>B. intermedia</em></td>
<td>25</td>
<td>&lt;1.0</td>
<td>&lt;4.0</td>
<td>&lt;0.1-&lt;4.0</td>
</tr>
<tr>
<td><em>C. barkeri</em></td>
<td>10</td>
<td>0.5</td>
<td>2.0</td>
<td>0.5-4.0</td>
</tr>
<tr>
<td><em>S. aureus</em></td>
<td>9</td>
<td>0.039</td>
<td>0.078</td>
<td>0.0125-0.078</td>
</tr>
<tr>
<td><em>N. paratuberculosis</em></td>
<td>24</td>
<td>3.13</td>
<td>6.25</td>
<td>0.78-6.25</td>
</tr>
<tr>
<td><em>P. multocida</em></td>
<td>132</td>
<td>16</td>
<td>32</td>
<td>&lt;2.0&gt;32</td>
</tr>
<tr>
<td><em>O. rhodovarius</em></td>
<td>45</td>
<td>0.012</td>
<td>0.25</td>
<td>0.012-0.25</td>
</tr>
<tr>
<td><em>C. perfringens</em></td>
<td>20</td>
<td>1</td>
<td>8</td>
<td>0.25-8.0</td>
</tr>
<tr>
<td><em>E. coli</em></td>
<td>214</td>
<td>3.13</td>
<td>6.25</td>
<td>0.2-6.25</td>
</tr>
</tbody>
</table>

Denagard is also compatible with recommended doses of chlorotetracycline and combined use has been shown to enhance the activity of both medicines against CRD and mixed respiratory infections following a *M. gallisepticum* challenge.

In an artificial infection study with *M. gallisepticum*, Denagard at 250ppm was given in the drinking water for 3 days at the time of infection and markedly reduced the level of airsacculitis in comparison with untreated controls and birds medicated with commonly used antimicrobials.

Denagard 12.5% Oral solution – a convenient dosage form for water medication (does not contain lactose)

The dosage for chickens and turkeys is 25 mg tiamulin/kg bodyweight or 100mls of Denagard 12.5% Oral Solution for 500 kgs of bird.

Denagard should be administered continuously in the drinking water at a level of 0.025% (250ppm) for 3-5 days to chickens and 5 days to turkeys.

This level provides approximately the following daily dosage of tiamulin

<table>
<thead>
<tr>
<th>Age of bird</th>
<th>Chickens (dose mg/kg)</th>
<th>Turkeys (dose mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 day</td>
<td>125-150</td>
<td>–</td>
</tr>
<tr>
<td>1 week</td>
<td>–</td>
<td>70</td>
</tr>
<tr>
<td>4 weeks</td>
<td>30-50</td>
<td>50</td>
</tr>
<tr>
<td>8 weeks</td>
<td>30-45</td>
<td>25-30</td>
</tr>
<tr>
<td>10 weeks</td>
<td>30-45</td>
<td>25</td>
</tr>
<tr>
<td>20 weeks</td>
<td>25</td>
<td>–</td>
</tr>
<tr>
<td>Layer/breeder</td>
<td>25</td>
<td>–</td>
</tr>
</tbody>
</table>

Denagard also shows in-vitro activity against...

...and reduces the recovery of *Mycoplasma* and possible further challenge

The percentage of re-isolation of *M. gallisepticum* from the airsac lesions was also greatly reduced in the Denagard 250ppm group.

*Incompatible with the ionophore anticoccidials monensin, salinomycin and narasin.*