Datasheet Enrofloxacin

Reference number : CEC/MAT : 42

Date of preparation : 1994.12.08

date : 09 July 2001
source : CSL

"Bank of Reference Standards"

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Figure 1. Molecular structure of Enrofloxacin

Name : 1-Cyclopropyl-7-(4-ethyl-1-piperazinyl)-6-fluoro-1,4-dihydro-4-oxo-3-quinolinecarboxylic acid
Synonym : Enrofloxacin
Molecular formula : C_{19}H_{22}FN,O_{3}
CAS # : 93106-60-6
Molecular weight : 359.40
Batch number : R-177-2

Manufacturer : Bayer

Acknowledgement to Bayer who kindly donated this compound for use as a reference standard.
Preparation and validation of reference standards.

The production of ampoules containing the reference material was described in the final report produced September 1995. The thermal stability of the compound was under investigation and the results for enrofloxacin over a period of two months are expressed in the table and chart below.

### Enrofloxacin Stability Trials

![Enrofloxacin Stability Trials](image)

#### Results of enrofloxacin stability trials

The results below are the % recovery (with cv) of enrofloxacin at 4 different storage temperatures over a period of two months compared with a standard equivalent to 2.0 mg.

<table>
<thead>
<tr>
<th>temp.</th>
<th>t = 0 months</th>
<th>t = 2 months</th>
<th>t = 6 months</th>
<th>t = 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>(°C)</td>
<td>(% recovery)</td>
<td>(% recovery)</td>
<td>(% recovery)</td>
<td>(% recovery)</td>
</tr>
<tr>
<td>Enroflox.</td>
<td>- 20°C</td>
<td>104.5 +/- 1.5</td>
<td>101.5 +/- 3.0</td>
<td>-</td>
</tr>
<tr>
<td>4°C</td>
<td>-</td>
<td>105.0 +/- 4.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Room Temp.</td>
<td>-</td>
<td>104.5 +/- 3.5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>37°C</td>
<td>-</td>
<td>106.0 +/- 2.5</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>