1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_9\text{H}_{17}\text{NO}_2\cdot\text{HCl} \)

Batch Molecular Weight: 207.7

Physical Appearance: White crystalline solid

Solubility: water to 100 mM with gentle warming, phosphate buffered saline to 100 mM

Storage: Desiccate at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: \( R_f = 0.5 \) (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])

Melting Point: Between 135 - 136°C

HPLC: Shows >99% purity

\(^1\text{H NMR:}\) Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

<table>
<thead>
<tr>
<th></th>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Nitrogen</th>
<th>Chlorine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical</td>
<td>52.05</td>
<td>8.73</td>
<td>6.74</td>
<td>17.07</td>
</tr>
<tr>
<td>Found</td>
<td>52.07</td>
<td>8.9</td>
<td>6.68</td>
<td>16.91</td>
</tr>
</tbody>
</table>
Product Name: Gabapentin hydrochloride
CAS Number: 60142-96-3
IUPAC Name: 1-(Aminomethyl)cyclohexaneacetic acid hydrochloride

Description:
Anticonvulsant with several possible mechanisms of action. Increases GABA in the brain and binds to a novel site associated with voltage-sensitive Ca\(^{2+}\) channels. Prevents neuronal death and is antinociceptive and anxiolytic.

Physical and Chemical Properties:
Batch Molecular Formula: C\(_9\)H\(_{17}\)NO\(_2\).HCl
Batch Molecular Weight: 207.7
Physical Appearance: White crystalline solid
Minimum Purity: >99%

Batch Molecular Structure:
\[
\text{HO}_2\text{C} \quad \text{NH}_2
\]

Storage: Desiccate at +4°C

Solubility & Usage Info:
- water to 100 mM with gentle warming
- phosphate buffered saline to 100 mM

Stability and Solubility Advice:
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:
- SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.
- SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References: