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:

![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>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>
</tr>
<tr>
<td>Found</td>
<td>52.07</td>
<td>8.9</td>
<td>6.68</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%

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 aliquotted 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.

Other Information:
INFORMATION FOR CUSTOMERS IN THE UK ONLY
This product is a Schedule 3 Home Office controlled substance and customers in the UK are required to hold the relevent licence or be exempt from restrictions in order to purchase and possess this material.

Licensing Information:
Sold for research purposes under agreement from Pfizer Inc.

References:

