1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{17}\text{H}_{21}\text{NO.HCl} \)
Batch Molecular Weight: 291.82
Physical Appearance: White solid
Solubility: Water to 50 mM with gentle warming
Storage: Store at RT

2. ANALYTICAL DATA

- HPLC: Shows 100% purity
- \(^1\text{H NMR:} \) Consistent with structure
- Mass Spectrum: Consistent with structure
- Optical Rotation: \([\alpha]_D = -39.6\) (Concentration = 1, Solvent = Methanol)
- Microanalysis:
  
<table>
<thead>
<tr>
<th>Element</th>
<th>Theoretical</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>69.97</td>
<td>70.06</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>7.6</td>
<td>7.65</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>4.8</td>
<td>4.84</td>
</tr>
</tbody>
</table>
Product Name: **Tomoxetine hydrochloride**

CAS Number: 82248-59-7

IUPAC Name: \((R)-N\text{-Methyl-γ-(2-methylphenoxy)-benzenepropanamine hydrochloride}\)

**Description:**
Potent and selective noradrenalin re-uptake inhibitor (Kᵢ values are 5, 77 and 1451 nM for inhibition of radioligand binding to human NET, SERT and DAT respectively). Displays minimal affinity for a range of other neurotransmitter receptors and transporters (Kᵢ > 1 μM). Antidepressant.

**Physical and Chemical Properties:**
- **Batch Molecular Formula:** C₁₇H₁₂NO.HCl
- **Batch Molecular Weight:** 291.82
- **Physical Appearance:** White solid
- **Minimum Purity:** >99%

**Storage:** Store at RT

**Solubility & Usage Info:**
- Water to 50 mM with gentle warming

**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:**