1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{18} \text{H}_{19} \text{ClF}_{7} \text{N}_{8} \cdot 2\text{HCl} \cdot 2\text{H}_{2}\text{O} \)

Batch Molecular Weight: 496.8

Physical Appearance: Yellow solid

Solubility:
- Water to 50 mM
- DMSO to 50 mM

Storage: Desiccate at +4°C

Batch Molecular Structure:

![Molecular Structure Image]

2. ANALYTICAL DATA

TLC: \( R_f = 0.35 \) (Dichloromethane: Methanol: Ammonia soln. [90:9:1])

HPLC: Shows 97.2% purity

\(^1\)H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

<table>
<thead>
<tr>
<th>Element</th>
<th>Theoretical</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>43.52</td>
<td>43.72</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>5.07</td>
<td>5.04</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>19.74</td>
<td>19.38</td>
</tr>
</tbody>
</table>
Product Name: BIBX 1382 dihydrochloride

**Description:**
Potent, selective inhibitor of epidermal growth factor receptor (EGFR) tyrosine kinase (IC₅₀ = 3 nM). Displays > 1000-fold lower potency against ErbB2 (IC₅₀ = 3.4 μM) and a range of other related tyrosine kinases (IC₅₀ > 10 μM). Oral administration inhibits growth of established human xenografts in athymic mice.

**Physical and Chemical Properties:**
Batch Molecular Formula: C₁₈H₁₉ClFN₇·2HCl·2H₂O
Batch Molecular Weight: 496.8
Physical Appearance: Yellow solid
Minimum Purity: >97%

**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:**