1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{13}\text{H}_{14}\text{ClN}_{7}\text{O}.\text{HCl.}^{1/2}\text{H}_{2}\text{O} \)

Batch Molecular Weight: 369.72

Physical Appearance: Yellow solid

Solubility: DMSO to 100 mM

Water to 10 mM

Storage: Store at +4°C

2. ANALYTICAL DATA

HPLC: Shows >98.7% purity

\( ^1\text{H NMR:} \) 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>42.23</td>
<td>41.86</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>4.5</td>
<td>4.36</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>26.52</td>
<td>26.32</td>
</tr>
</tbody>
</table>
Product Name: Benzamil

Description:
Na+/Ca²⁺ exchanger (NCX) inhibitor (IC₅₀ ~ 100 nM); TRPP3 channel blocker (IC₅₀ = 1.1 μM for inhibition of Ca²⁺-activated TRPP3 channel activity). Also non-selective Deg/ENaC family blocker; reduces mechanosensitivity of colonic afferents. More potent derivative of amiloride (Cat. No. 0890).

Physical and Chemical Properties:
Batch Molecular Formula: C₁₃H₁₄ClN₇O.HCl.¾H₂O
Batch Molecular Weight: 369.72
Physical Appearance: Yellow solid
Minimum Purity: >98%

Storage: Store at +4°C

Solubility & Usage Info:
DMSO to 100 mM
water to 10 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: