Product Name: PNU 37883 hydrochloride
CAS Number: 57568-80-6
IUPAC Name: \( N\)-Cyclohexyl-N' -tricyclo[3.3.1.1^{3,7}]dec-1-yl-4-morpholinecarboximidamide hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

   **Batch Molecular Formula:** C_{21}H_{35}N_{3}O\cdot HCl
   **Batch Molecular Weight:** 381.98
   **Physical Appearance:** White solid
   **Solubility:** DMSO to 25 mM, ethanol to 100 mM
   **Storage:** Desiccate at RT
   **Batch Molecular Structure:**

2. ANALYTICAL DATA

   **TLC:** \( R_{f} = 0.14 \) (Dichloromethane:Methanol:Ammonia soln. [9:1:0.1])
   **HPLC:** Shows 100% 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>C</td>
<td>66.03</td>
<td>65.99</td>
</tr>
<tr>
<td>H</td>
<td>9.5</td>
<td>9.59</td>
</tr>
<tr>
<td>N</td>
<td>11</td>
<td>11.01</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
**Product Information**

**Product Name:** PNU 37883 hydrochloride

**Catalog No.:** 2095  **Batch No.:** 1

**CAS Number:** 57568-80-6  
**IUPAC Name:** N-Cyclohexyl-N’-tricyclo[3.3.1.13,7]dec-1-yl-4-morpholinecarboximidamide hydrochloride

**Description:**
Novel antagonist selective for the vascular form of K$_6$ (K$_{ATP}$) channel; inhibits K$_6$ currents in isolated mesenteric artery smooth muscle cells (K$_6$ = 65 nM) but not in cardiac or skeletal myocytes. Inhibits blood vessel relaxation and hypotension induced by pinacidil in vivo. Displays weak diuretic effects.

**Physical and Chemical Properties:**

**Batch Molecular Formula:** C$_{21}$H$_{35}$N$_3$O.HCl  
**Batch Molecular Weight:** 381.98  
**Physical Appearance:** White solid  
**Minimum Purity:** >99%

**Storage:** Desiccate at RT

**Solubility & Usage Info:**
DMSO to 25 mM  
ethanol 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:**

