1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( C_{16}H_{18}N_4O_2 \cdot 2HCl \)

Batch Molecular Weight: 371.27

Physical Appearance: White solid

Solubility: Water to 25 mM

Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: \( R_f = 0.2 \) (Ethyl acetate:Petroleum ether [3:7])

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>Carbon</td>
<td>51.76</td>
<td>51.85</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>5.43</td>
<td>5.46</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>15.09</td>
<td>14.97</td>
</tr>
<tr>
<td>Chlorine</td>
<td>19.1</td>
<td>19.05</td>
</tr>
</tbody>
</table>
Product Name: **Piribedil dihydrochloride**

**CAS Number:** 1451048-94-4  
**IUPAC Name:** 2-[4-(1,3-Benzodioxol-5-ylmethyl)-1-piperazinyl]pyrimidine dihydrochloride

**Description:**  
A direct dopamine agonist, in clinical use for treatment of dopaminergic system dysfunction. Recent work suggests that it is selective for the D<sub>3</sub> subtype, for which it has 20 times higher affinity than for D<sub>2</sub>, and possesses no significant affinity for D<sub>1</sub> receptors.

**Physical and Chemical Properties:**
- **Batch Molecular Formula:** C<sub>19</sub>H<sub>15</sub>N<sub>4</sub>O<sub>2</sub>·2HCl  
- **Batch Molecular Weight:** 371.27  
- **Physical Appearance:** White solid  
- **Minimum Purity:** >99%

**Storage:**  
Store at RT

**Solubility & Usage Info:**
- **water to 25 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:**  
- **Merck Index** 12 7648.  

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