1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{23}\text{H}_{27}\text{FN}_{4}\text{O}_{3} \)

Batch Molecular Weight: 426.48

Physical Appearance: White solid

Solubility: DMSO to 10 mM

Storage: Store at +4°C

2. ANALYTICAL DATA

HPLC: Shows 98.2% purity

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

Mass Spectrum: Consistent with structure

Microanalysis:

<table>
<thead>
<tr>
<th></th>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Nitrogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical</td>
<td>64.77</td>
<td>6.38</td>
<td>13.14</td>
</tr>
<tr>
<td>Found</td>
<td>64.37</td>
<td>6.37</td>
<td>12.97</td>
</tr>
</tbody>
</table>
**Product Name:** Paliperidone  
**CAS Number:** 144598-75-4  
**IUPAC Name:** 3-[2-[4-(6-Fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]ethyl]-6,7,8,9-tetrahydro-9-hydroxy-2-methyl-4H-pyrido[1,2-a]pyrimidin-4-one

**Description:**
A typical antipsychotic; metabolite of risperidone (Cat. No. 2865). Exhibits high affinity for 5-HT<sub>2A</sub> receptors (K<sub>i</sub> = 0.4 nM for cloned human 5-HT<sub>2A</sub> receptors). Also displays nanomolar affinity for human D<sub>2</sub> receptors.

**Physical and Chemical Properties:**
- **Batch Molecular Formula:** C<sub>23</sub>H<sub>25</sub>F<sub>2</sub>N<sub>4</sub>O<sub>3</sub>
- **Batch Molecular Weight:** 426.48
- **Physical Appearance:** White solid
- **Minimum Purity:** >98%

**Storage:** Store at +4°C

**Solubility & Usage Info:**
DMSO 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:**