1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{23}\text{H}_{27}\text{FN}_{4}\text{O}_{2}\cdot\frac{1}{4}\text{H}_{2}\text{O} \)

Batch Molecular Weight: 414.98

Physical Appearance: White solid

Solubility: DMSO to 10 mM ethanol to 10 mM

Storage: Store at +4°C

2. ANALYTICAL DATA

HPLC: Shows >99.7% purity

\(^1\text{H} \)NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

<table>
<thead>
<tr>
<th></th>
<th>Theoretical</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>66.57</td>
<td>66.67</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>6.68</td>
<td>6.6</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>13.5</td>
<td>13.49</td>
</tr>
</tbody>
</table>
### Description:
Risperidone is an atypical antipsychotic agent that displays 5-HT$_{2A}$ receptor antagonism. Also displays high affinity at D$_2$ receptors ($K_i$ values are 0.4 and 3.13 nM for 5-HT$_{2A}$ and D$_2$ receptors respectively).

### Physical and Chemical Properties:
**Batch Molecular Formula:** $C_{23}H_{27}FN_2O_2·\frac{1}{4}H_2O$
**Batch Molecular Weight:** 414.98
**Physical Appearance:** White solid

**Minimum Purity:** ≥99%

### Storage:
Store at +4°C

### Solubility & Usage Info:
**DMSO to 10 mM**
**Ethanol 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: