1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \(\text{C}_{15}\text{H}_{20}\text{ClN}_{5}\text{O}_{4} \cdot \frac{1}{4}\text{H}_{2}\text{O}\)

Batch Molecular Weight: 374.31

Physical Appearance: Off White solid

Solubility: DMSO to 100 mM ethanol to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:

![Molecular Structure](image)

2. ANALYTICAL DATA

TLC: \(R_f = 0.2\) (Chloroform:Methanol [9:1])

HPLC: Shows 98.8% 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>48.13</td>
<td>48.34</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>5.52</td>
<td>5.52</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>18.71</td>
<td>18.33</td>
</tr>
</tbody>
</table>

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

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**Product Information**

**Product Name:** 2-Chloro-N<sup>6</sup>-cyclopentyladenosine  
**Catalog No.:** 1705  
**Batch No.:** 7

### Description:
Potent and selective adenosine A<sub>1</sub> receptor agonist (K<sub>i</sub> values are 0.8, 2300 and 42 nM for human A<sub>1</sub>, A<sub>2A</sub> and A<sub>3</sub> receptors respectively; EC<sub>50</sub> = 18800 nM for hA<sub>2B</sub>). Centrally active following systemic administration in vivo.

### Physical and Chemical Properties:
- **Batch Molecular Formula:** C<sub>15</sub>H<sub>20</sub>CIN<sub>2</sub>O<sub>4</sub>·¼H<sub>2</sub>O
- **Batch Molecular Weight:** 374.31
- **Physical Appearance:** Off White solid
- **Minimum Purity:** >98%

### Batch Molecular Structure:

![Batch Molecular Structure Image]

### Storage:
Desiccate at RT

### Solubility & Usage Info:
- DMSO to 100 mM
- Ethanol to 100 mM

**CAUTION** - This product is hygroscopic and we recommend that it is desiccated upon arrival. Solutions should be made up as soon as the vial is opened.

### 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: