1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{14}\text{H}_{18}\text{N}_{4}\text{O} \)
Batch Molecular Weight: 258.32
Physical Appearance: Yellow solid
Solubility: DMSO to 100 mM
Storage: Store at RT
Batch Molecular Structure:

![Batch Molecular Structure Image]

2. ANALYTICAL DATA

TLC: \( R_f = 0.28 \) (Chloroform:Methanol [95:5])
HPLC: Shows >99.5% 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>65.09</td>
<td>65.05</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>7.02</td>
<td>6.95</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>21.69</td>
<td>21.83</td>
</tr>
</tbody>
</table>
**Product Information**

**Product Name:** TC-P 262

**Catalog No.:** 4386  **Batch No.:** 1

**CAS Number:** 873398-67-5

**IUPAC Name:** 5-[5-Methyl-2-(1-methylethyl)phenoxy]-2,4-pyrimidinediamine

**Description:**
Selective P2X$_3$ and P2X$_{2/3}$ receptor antagonist (pIC$_{50}$ values are 7.39 and 6.68 respectively). Displays no detectable activity at P2X$_1$, P2X$_2$, P2X$_4$ and P2X$_7$ receptors (pIC$_{50}$ < 4.7).

**Physical and Chemical Properties:**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch Molecular Formula</td>
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</tr>
<tr>
<td>Batch Molecular Weight</td>
<td>258.32</td>
</tr>
<tr>
<td>Physical Appearance</td>
<td>Yellow solid</td>
</tr>
<tr>
<td>Minimum Purity</td>
<td>&gt;99%</td>
</tr>
</tbody>
</table>

**Storage:** Store at RT

**Solubility & Usage Info:**
DMSO 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. Whenever possible solutions should be made up and used on the same day.

**References:**