1. PHYSICAL AND CHEMICAL PROPERTIES

   Batch Molecular Formula: \( \text{C}_{12}\text{H}_{11}\text{NO} \)

   Batch Molecular Weight: 185.23

   Physical Appearance: Off White solid

   Solubility: water to 20 mM
               1eq. HCl to 100 mM

   Storage: Store at RT

2. ANALYTICAL DATA

   HPLC: Shows 99.6% purity

   \(^1\text{H NMR:} \) 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>77.81</td>
<td>5.99</td>
<td>7.56</td>
</tr>
<tr>
<td>Found</td>
<td>77.94</td>
<td>5.99</td>
<td>7.64</td>
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</tbody>
</table>
Product Name: Pirfenidone
CAS Number: 53179-13-8
IUPAC Name: 5-methyl-1-phenyl-2(1H)-pyridinone

Description:
Antifibrotic agent, effective in models of pulmonary and lung fibrosis. Inhibits collagen production and fibroblast proliferation. Regulates cytokine levels following oral administration in vivo. Potent scavenger of free radicals and inhibitor of lipid peroxidation.

Physical and Chemical Properties:
- Batch Molecular Formula: C_{12}H_{11}NO
- Batch Molecular Weight: 185.23
- Physical Appearance: Off White solid
- Minimum Purity: >99%

Storage: Store at RT

Solubility & Usage Info:
- water to 20 mM
- 1eq. HCl 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. Wherever possible solutions should be made up and used on the same day.

References:

