1. PHYSICAL AND CHEMICAL PROPERTIES

   Batch Molecular Formula: \( \text{C}_{17}\text{H}_{15}\text{N}_{5}\text{O} \)
   Batch Molecular Weight: 305.33
   Physical Appearance: White solid
   Solubility: DMSO to 50 mM
   Storage: Store at +4°C
   Batch Molecular Structure:

   ![Molecular Structure Image]

2. ANALYTICAL DATA

   TLC: \( R_f = 0.23 \) (Ethyl acetate)
   HPLC: Shows 100% purity
   \(^1\text{H NMR:}\) Consistent with structure
   Mass Spectrum: Consistent with structure
   Microanalysis:

<table>
<thead>
<tr>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Nitrogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical</td>
<td>66.87</td>
<td>4.95</td>
</tr>
<tr>
<td>Found</td>
<td>66.77</td>
<td>4.91</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
**Product Name:** PF 06447475  
**Catalog No.:** 5716  
**Batch No.:** 1  
**CAS Number:** 1527473-33-1  
**IUPAC Name:** 3-[4-(4-Morpholinyl)-7H-pyrrolo[2,3-d]pyrimidin-5-yl]benzonitrile

**Description:** 
Potent LRRK2 inhibitor (IC$_{50}$ = 3 nM). Attenuates α-synuclein-induced dopaminergic neurodegeneration and neuroinflammation in G2019S-LRRK2 expressing rats. Also neuroprotective in wild type rats. Brain penetrant.

**Physical and Chemical Properties:**  
**Batch Molecular Formula:** C$_{17}$H$_{17}$N$_{3}$O  
**Batch Molecular Weight:** 305.33  
**Physical Appearance:** White solid  
**Minimum Purity:** >98%

**Storage:** Store at +4°C

**Solubility & Usage Info:**  
DMSO to 50 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:**  