1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{17}\text{H}_{24}\text{N}_{6}\text{O} \)
Batch Molecular Weight: 328.41
Physical Appearance: Yellow solid
Solubility:
- 1 eq. HCl to 50 mM
- DMSO to 100 mM
- Ethanol to 20 mM
Storage: Desiccate at +4°C

2. ANALYTICAL DATA

TLC: \( R_f = 0.55 \) (Chloroform:Methanol [9:1])
HPLC: Shows >99.5% purity
Chiral HPLC: Shows >99.8% purity
\(^1\text{H} \text{NMR:} \) Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

<table>
<thead>
<tr>
<th></th>
<th>Theoretical</th>
<th>Found</th>
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</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>62.17</td>
<td>61.85</td>
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<tr>
<td>Hydrogen</td>
<td>7.37</td>
<td>7.46</td>
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<tr>
<td>Nitrogen</td>
<td>25.59</td>
<td>25.6</td>
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</tbody>
</table>
Product Name: K 579  
Catalog No.: 2790  
Batch No.: 2

CAS Number: 440100-64-1  
IUPAC Name: (2S)-1-[[4-Methyl-1-(2-pyrimidinyl)-4-piperidinyl]amino]acetyl]-2-pyrrolidinecarbonitrile

Description:  
Dipeptidyl peptidase IV inhibitor. Inhibits rat, canine, human and monkey enzymes with IC₅₀ values of 3, 5, 8, and 8 nM respectively. Long-acting hypoglycemic agent; attenuates glucose excursions following glucose loading in Zucker fatty rats.

Physical and Chemical Properties:  
Batch Molecular Formula: C₁₇H₂₀N₄O  
Batch Molecular Weight: 328.41  
Physical Appearance: Yellow solid

Minimum Purity: >99%

Storage:  
Desiccate at +4°C  
CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:  
1eq. HCl to 50 mM  
DMSO to 100 mM  
ethanol to 20 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:  