1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( C_{24}H_{32}O_4S \)
Batch Molecular Weight: 416.57
Physical Appearance: White solid
Solubility: DMSO to 100 mM, ethanol to 50 mM
Storage: Store at RT

2. ANALYTICAL DATA

Melting Point: Between 204 - 207°C
HPLC: Shows >98.8% purity
\(^1\text{H NMR:}\) Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: \([\alpha]_D = +35.2\) (Concentration = 1, Solvent = Chloroform)
Microanalysis:

<table>
<thead>
<tr>
<th>Element</th>
<th>Theoretical</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>69.2</td>
<td>69.09</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>7.74</td>
<td>7.75</td>
</tr>
<tr>
<td>Nitrogen</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Product Information

Product Name: Spironolactone
Catalog No.: 2968
Batch No.: 1

CAS Number: 52-01-7
EC Number: 200-133-6

IUPAC Name: (7\(\alpha\),17\(\alpha\))-7-(Acetylthio)-17-hydroxy-3-oxopregn-4-ene-21-carboxylic acid \(\gamma\)-lactone

Description:
Competitive mineralocorticoid (aldosterone) receptor antagonist that exhibits antihypertensive activity in vivo. Also displays antiandrogen activity and inhibits steroid hormone biosynthesis.

Physical and Chemical Properties:
- Batch Molecular Formula: \(C_{24}H_{27}O_9S\)
- Batch Molecular Weight: 416.57
- Physical Appearance: White solid

Minimum Purity: >98%

Storage: Store at RT

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