1. PHYSICAL AND CHEMICAL PROPERTIES

- **Batch Molecular Formula:** C\textsubscript{20}H\textsubscript{40}N\textsubscript{4}O\textsubscript{10}.2H\textsubscript{2}SO\textsubscript{4}.5H\textsubscript{2}O
- **Batch Molecular Weight:** 782.79
- **Physical Appearance:** White solid
- **Solubility:** water to 75 mM
- **Storage:** Store at +4°C

![Batch Molecular Structure]

2. ANALYTICAL DATA

- **\textsuperscript{1}H NMR:** Consistent with structure
- **Mass Spectrum:** Consistent with structure
- **Optical Rotation:** [\(\alpha\)]\textsubscript{D} = +106.8 (Concentration = 1, Solvent = Water)
- **Microanalysis:**
  
<table>
<thead>
<tr>
<th>Element</th>
<th>Theoretical</th>
<th>Found</th>
<th>Potency (on dried basis):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>30.69</td>
<td>30.81</td>
<td>777 (\mu)g/mg</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>6.95</td>
<td>6.84</td>
<td></td>
</tr>
<tr>
<td>Nitrogen</td>
<td>7.16</td>
<td>7.28</td>
<td></td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Product Information**

**Product Name:** G418 disulfate salt  
**CAS Number:** 108321-42-2  
**Catalog No.:** 4131  
**Batch No.:** 3

### Description:
Aminoglycosidic antibiotic. Inhibits protein synthesis in both prokaryotic and eukaryotic cells. Used for selection of eukaryotic cells transfected with the neo gene. This product has been cell culture tested.

### Physical and Chemical Properties:
- **Batch Molecular Formula:** C_{20}H_{46}N_{10}O_{10}.2H_{2}SO_{4}.5H_{2}O
- **Batch Molecular Weight:** 782.79
- **Physical Appearance:** White solid

### Storage:
Store at +4°C

### Solubility & Usage Info:
- water to 75 mM
- This product has been cell culture tested.

### 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: