1. PHYSICAL AND CHEMICAL PROPERTIES

   Batch Molecular Formula: \( \text{C}_{13}\text{H}_{21}\text{NO}_{3}.\frac{1}{2}\text{H}_{2}\text{SO}_{4} \)
   Batch Molecular Weight: 288.35
   Physical Appearance: White solid
   Solubility: water to 100 mM
   Storage: Store at RT
   Batch Molecular Structure:

2. ANALYTICAL DATA

   HPLC: Shows 99.5% purity
   \(^1\text{H} \text{NMR:} \) Consistent with structure
   Mass Spectrum: Consistent with structure
   Microanalysis:

<table>
<thead>
<tr>
<th>Element</th>
<th>Theoretical</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>54.15</td>
<td>54.12</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>7.69</td>
<td>7.71</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>4.86</td>
<td>4.9</td>
</tr>
</tbody>
</table>

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

**Product Name:** Salbutamol hemisulfate
**Catalog No.:** 0634  **Batch No.:** 6

**CAS Number:** 51022-70-9  **EC Number:** 256-916-8

**IUPAC Name:** \( \alpha \)-{[(1,1-Dimethylethyl)amino]methyl}-4-hydroxy-1,3-benzenedimethanol hemisulfate

### Description:
Non-selective \( \beta \)-adrenergic agonist, more potent at \( \beta_2 \) than \( \beta_1 \) receptors.

### Physical and Chemical Properties:
- **Batch Molecular Formula:** \( \text{C}_{13}\text{H}_{21}\text{NO}_3\cdot\frac{1}{2}\text{H}_2\text{SO}_4 \)
- **Batch Molecular Weight:** 288.35
- **Physical Appearance:** White solid

**Minimum Purity:** >99%

### Storage:
Store at RT

**Solubility & Usage Info:**
water 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:
- **Strosberg and Pietri-Rouxel** (1996) Function and regulation of the \( \beta_3 \)-adrenoceptor. TiPS **17** 373. PMID: 8979772.
- **Merck Index** 12 217.