Product Name: D-Amphetamine sulfate
CAS Number: 51-63-8
IUPAC Name: (+)-α-Methylphenethylamine hemisulfate salt

1. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch Molecular Formula</td>
<td>C₉H₁₃N·1/2H₂SO₄</td>
</tr>
<tr>
<td>Batch Molecular Weight</td>
<td>184.25</td>
</tr>
<tr>
<td>Physical Appearance</td>
<td>White solid</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water to 100 mM</td>
</tr>
<tr>
<td>Storage</td>
<td>Desiccate at RT</td>
</tr>
<tr>
<td>Batch Molecular Structure</td>
<td><img src="image" alt="Molecular Structure" /></td>
</tr>
</tbody>
</table>

2. ANALYTICAL DATA

<table>
<thead>
<tr>
<th>Method</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPLC</td>
<td>Shows 100% purity</td>
</tr>
<tr>
<td>Chiral HPLC</td>
<td>Shows 99.7% purity</td>
</tr>
<tr>
<td>¹H NMR</td>
<td>Consistent with structure</td>
</tr>
<tr>
<td>Mass Spectrum</td>
<td>Consistent with structure</td>
</tr>
</tbody>
</table>
**Product Information**

**Product Name:** D-Amphetamine sulfate  
**Catalog No.:** 2813  
**EC Number:** 200-111-6

**CAS Number:** 51-63-8  
**IUPAC Name:** (+)-α-Methylphenethylamine hemisulfate salt

**Description:**
D-Amphetamine sulfate is a CNS stimulant. Targets monoamine transporters to elevate synaptic levels of noradrenalin, dopamine and serotonin. Also α7 nAChR antagonist.

**Physical and Chemical Properties:**
- **Batch Molecular Formula:** C<sub>9</sub>H<sub>13</sub>N·1/2H<sub>2</sub>SO<sub>4</sub>
- **Batch Molecular Weight:** 184.25
- **Physical Appearance:** White solid
- **Minimum Purity:** ≥ 99%

**Batch Molecular Structure:**

![Molecular Structure](image)

**Storage:** Desiccated 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 aliquotted 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.

**Other Information:**
**INFORMATION FOR CUSTOMERS IN THE UK ONLY**
This product is a Schedule 2 Home Office controlled substance and customers in the UK are required to hold the relevant licence or be exempt from restrictions in order to purchase and possess this material.

**References:**
- Garton et al (2018) Amphetamine enantiomers inhibit homomeric α7 nicotinic receptor through a competitive mechanism and within the intoxication levels in humans. Neuropharmacology. PMID: 30359640.