1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \(C_9H_{13}N\cdot\frac{1}{2}H_2SO_4\).
Batch Molecular Weight: 184.25
Physical Appearance: White solid
Solubility: water to 100 mM
Storage: Desiccate at RT

2. ANALYTICAL DATA

TLC: \(R_f = 0.2\) (Chloroform:Methanol [9:1])
HPLC: Shows 100% purity
\(^1\)H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
**Product Information**

**Product Name:** D-Amphetamine sulfate  
**CAS Number:** 51-63-8  
**IUPAC Name:** (+)-α-Methylphenylethylamine hemisulfate salt  
**Catalog No.:** 2813  
**Batch No.:** 7  
**EC Number:** 200-111-6

**Description:**
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:** C9H13N.H1/2H2SO4  
- **Batch Molecular Weight:** 184.25  
- **Physical Appearance:** White solid  
- **Minimum Purity:** >99%  
- **Batch Molecular Structure:**

![Molecular Structure](image)

**Solubility & Usage Info:**
- Water to 100 mM

**Storage:** Desiccate at RT

**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.

**INFORMATION FOR CUSTOMERS IN THE USA ONLY**
This product is a Schedule II DEA controlled substance and customers in the USA are required to hold a controlled substance registration in order to purchase and possess this material (in accordance with Title 21 code of federal regulations part 1300 to end).

**INFORMATION FOR CUSTOMERS IN CANADA ONLY**
This product is a Schedule I CDSA controlled substance and customers in Canada require an import permit to purchase 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.