bio-techne
TOCRIS

Print Date: Sep 5th 2025

Certificate of Analysis

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Product Name: **Physostigmine hemisulfate** **Catalog No.: 0622** **Batch No.: 14**

CAS Number: 64-47-1 EC Number: 200-585-4

IUPAC Name: (3a*S*)-*cis*-1,2,3,3a,8,8a-Hexahydro-1,3a,8-trimethylpyrrolo[2,3-*b*]indol-5-ol methylcarbamate hemisulfate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{15}H_{21}N_3O_2.½H_2SO_4.¼H_2O$

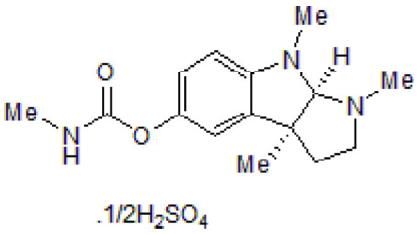
Batch Molecular Weight: 328.89

Physical Appearance: Pale pink solid

Solubility: water to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:



$.1/2H_2SO_4$

2. ANALYTICAL DATA

HPLC: Shows 99.9% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	54.78	6.9	12.78
Found	54.39	7.05	12.8

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Description:

Physostigmine hemisulfate is a cholinesterase inhibitor.

Physical and Chemical Properties:

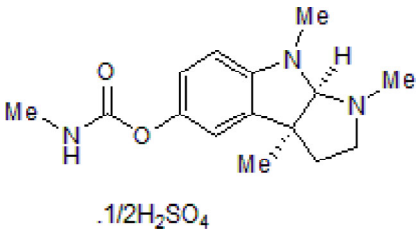
Batch Molecular Formula: $C_{15}H_{21}N_3O_2.½H_2SO_4.¼H_2O$

Batch Molecular Weight: 328.89

Physical Appearance: Pale pink solid

Minimum Purity: ≥98%

Batch Molecular Structure:



$.1/2H_2SO_4$

Storage: Desiccate 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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

Millard and Broomfield (1995) Anticholinesterases: medical applications of neurochemical principles. J.Neurochem ***64*** 1909. PMID: 7722478.

Merck Index ***12*** 7540.