

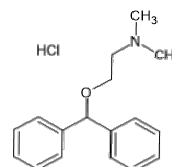
# Certificate of Analysis



## Product Identification

**Catalog number** HB2617  
**Compound name** Diphenhydramine hydrochloride  
**Chemical name** 2-Diphenylmethoxy-N,N-dimethylethanamine  
**Batch number** E2270-1-1  
**Batch molecular formula** C<sub>17</sub>H<sub>21</sub>NO.HCl.0.1H<sub>2</sub>O  
**Batch molecular weight** 293.62

## Chemical Structure



## Method

## QC requirement

## QC Result

<b>HPLC</b>	Reverse Phase HPLC shows >98% purity	Meets specification: 100%
<b>NMR</b>	1H NMR in D <sub>2</sub> O at 400 MHz consistent with structure	Meets specification
<b>Mass spectrum</b>	Electrospray positive analysis consistent with structure	Meets specification
<b>Microanalysis</b>	Elemental analysis is within 0.4% for the batch molecular formula	Meets specification
<b>Physical appearance</b>	White to off-white solid	Meets specification: White solid
<b>Solubility</b>	Soluble in water (100 mM)	Meets specification

Produced by Richard Patterson

Signature

Passed by Steve Roome

Signature

Date

06/07/2023

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.