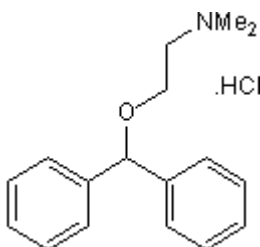


**Product Name:** Diphenhydramine hydrochloride  
**CAS Number:** 147-24-0  
**IUPAC Name:** 2-Diphenylmethoxy-*N,N*-dimethylethanamine hydrochloride

**Catalog No.:** 3072  
**Batch No.:** 1  
**EC Number:** 205-687-2

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>17</sub>H<sub>21</sub>NO.HCl  
**Batch Molecular Weight:** 291.82  
**Physical Appearance:** crystalline solid  
**Solubility:** water to 100 mM  
**Storage:** Desiccate at RT  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**Melting Point:** Between 166 - 169°C  
**HPLC:** Shows >99.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

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

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**Description:**

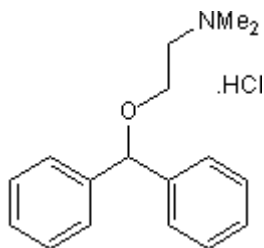
H<sub>1</sub> receptor antagonist. Antihistamine.

**Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>17</sub>H<sub>21</sub>NO.HCl  
 Batch Molecular Weight: 291.82  
 Physical Appearance: crystalline solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Desiccate at RT

**CAUTION** - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**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:**

**Khaliya et al** (1999) Block of potassium currents in guinea pig ventricular myocytes and lengthening of cardiac repolarization in man by the histamine H<sub>1</sub> receptor antagonist diphenhydramide. *J.Pharmacol.Exp.Ther.* **288** 858. PMID: 9918600.

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USA & CANADA Tel: (800) 343-7475 EUROPE Tel: +44 (0)1235 529449 CHINA Tel: +86 (21) 52380373  
 www.RnDSystems.com