

**Product Name:** Asenapine maleate

**Catalog No.:** 3737

**Batch No.:** 1

CAS Number: 85650-56-2

EC Number: 265-829-4

IUPAC Name: (3a*R*\*,12b*R*\*)-5-Chloro-2,3,3a,12b-tetrahydro-2-methyl-1*H*-dibenz[2,3:6,7]oxepino[4,5-*c*]pyrrole maleate

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>17</sub>H<sub>16</sub>ClNO.C<sub>4</sub>H<sub>4</sub>O<sub>4</sub>

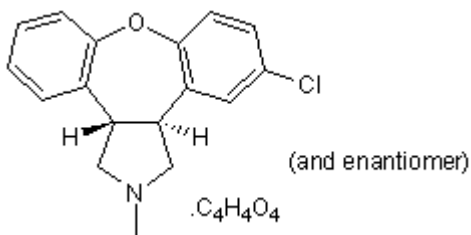
**Batch Molecular Weight:** 401.84

**Physical Appearance:** Off-white solid

**Solubility:** DMSO to 100 mM  
ethanol to 50 mM

**Storage:** Store at +4°C

**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.1% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	62.77	5.02	3.49
Found	62.77	4.98	3.41

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**Description:**

Novel psychopharmacologic agent. Displays antagonist activity at 5-HT, dopamine, noradrenalin and histamine receptor subtypes (pK<sub>i</sub> values are 8.60, 8.40, 10.15, 9.75, 10.46, 8.84, 9.60, 9.94, 8.85, 8.90, 8.84, 9.38, 8.95, 8.93, 8.9, 9.49, 8.91, 9.00 and 8.21 for 5-HT<sub>1A</sub>, 5-HT<sub>1B</sub>, 5-HT<sub>2A</sub>, 5-HT<sub>2B</sub>, 5-HT<sub>2C</sub>, 5-HT<sub>5A</sub>, 5-HT<sub>6</sub>, 5-HT<sub>7</sub>, D<sub>1</sub>, D<sub>2L</sub>, D<sub>2S</sub>, D<sub>3</sub>, D<sub>4</sub>, α<sub>1A</sub>, α<sub>2A</sub>, α<sub>2B</sub>, α<sub>2C</sub>, H<sub>1</sub> and H<sub>2</sub> receptors respectively). Displays no appreciable affinity for muscarinic receptors. Exhibits potent activity in animal models predictive of antipsychotic efficacy.

**Physical and Chemical Properties:**

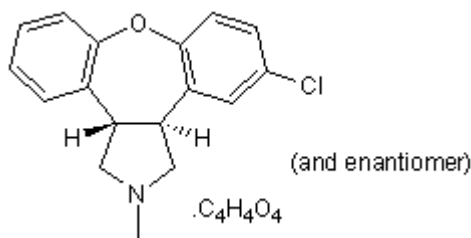
Batch Molecular Formula: C<sub>17</sub>H<sub>16</sub>ClNO.C<sub>4</sub>H<sub>4</sub>O<sub>4</sub>

Batch Molecular Weight: 401.84

Physical Appearance: Off-white solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**References:**

**Shahid et al** (2009) Asenapine: a novel psychopharmacologic agent with a unique human receptor signature. *J.Psychopharmacol.* **23** 65. PMID: 18308814.

**Meltzer et al** (2009) Asenapine. *Nat.Rev.Drug Discov.* **8** 843. PMID: 19876039.

**Marston et al** (2009) Asenapine effects in animal models of psychosis and cognitive function. *Psychopharmacol.* **206** 699.

**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 50 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.

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