

**Product Name:** Phenamil mesylate

**Catalog No.:** 3379

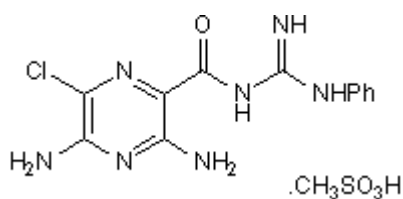
**Batch No.:** 1

**CAS Number:** 1161-94-0

**IUPAC Name:** 3,5-Diamino-6-chloro-*N*-[imino(phenylamino)methyl]pyrazinecarboxamide methanesulfonate salt

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>12</sub>H<sub>12</sub>ClN<sub>7</sub>O.CH<sub>3</sub>SO<sub>3</sub>H.¾H<sub>2</sub>O  
**Batch Molecular Weight:** 415.34  
**Physical Appearance:** Yellow solid  
**Solubility:** DMSO to 100 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.6% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	37.75	4.34	23.35
Found	38.13	4.05	23.14

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**Description:**

TRPP3 channel inhibitor (IC<sub>50</sub> = 0.14 μM). Also inhibits epithelial Na<sup>+</sup> channels (K<sub>d</sub> = 0.4 nM for a high affinity site on the epithelial Na<sup>+</sup> channel). Derivative of amiloride (Cat. No. 0890).

**Physical and Chemical Properties:**

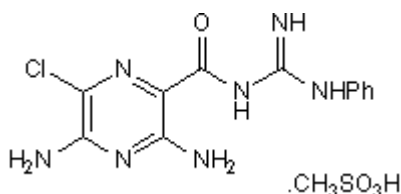
Batch Molecular Formula: C<sub>12</sub>H<sub>12</sub>ClN<sub>7</sub>O.CH<sub>3</sub>SO<sub>3</sub>H.¾H<sub>2</sub>O

Batch Molecular Weight: 415.34

Physical Appearance: Yellow solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO 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:**

**Barbry et al** (1989) Biochemical identification of two types of phenamil binding sites associated with amiloride-sensitive Na<sup>+</sup> channels. *Biochemistry*. **28** 3744. PMID: 2546581.

**Dai et al** (2007) Inhibition of TRPP3 channel by amiloride and analogs. *Mol.Pharmacol.* **72** 1576. PMID: 17804601.

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