

**Product Name:** Salmeterol xinafoate

**Catalog No.:** 4712

**Batch No.:** 1

CAS Number: 94749-08-3

IUPAC Name: 4-Hydroxy- $\alpha$ 1-[[[6-(4-phenylbutoxy)hexyl]amino]methyl]-1,3-benzenedimethanol 1-hydroxy-2-naphthalenecarboxylic acid salt

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:**  $C_{25}H_{37}NO_4 \cdot C_{11}H_8O_3$

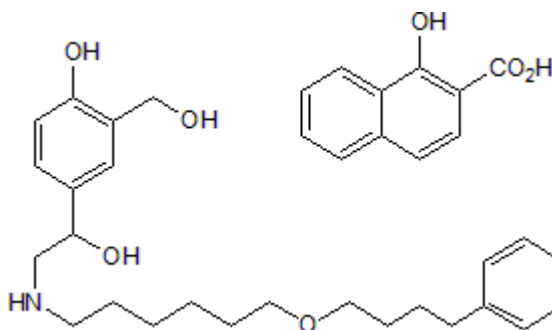
**Batch Molecular Weight:** 603.75

**Physical Appearance:** White solid

**Solubility:** DMSO to 100 mM  
ethanol to 20 mM

**Storage:** Desiccate at RT

**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.7% purity

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

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

Carbon Hydrogen Nitrogen

Theoretical 71.62 7.51 2.32

Found 71.28 6.95 2.43

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

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**Description:**

Long-acting  $\beta_2$  adrenergic receptor agonist. Inhibits the release of histamine, leukotrienes and prostaglandin D<sub>2</sub>, and blocks GM-CSF production from human cultured mast cells. Exhibits efficacious bronchodilatory activity in patients with asthma or chronic obstructive pulmonary disease (COPD).

**Physical and Chemical Properties:**

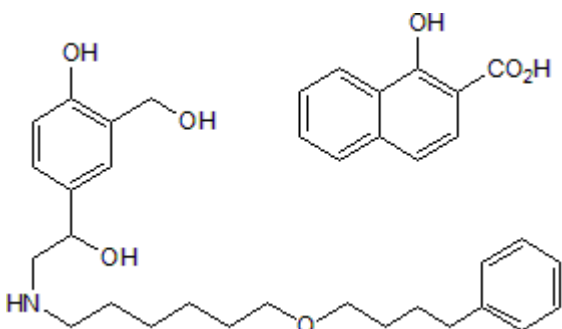
Batch Molecular Formula: C<sub>25</sub>H<sub>37</sub>NO<sub>4</sub>·C<sub>11</sub>H<sub>8</sub>O<sub>3</sub>

Batch Molecular Weight: 603.75

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Desiccate at RT

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 20 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:**

**Roberts et al** (1999) The long-acting beta2-agonist salmeterol xinafoate: effects on airway inflammation in asthma. *Eur.Respir.J.* **14** 275. PMID: 10515401.

**Rennard et al** (2001) Use of a long-acting inhaled beta2-adrenergic agonist, salmeterol xinafoate, in patients with chronic obstructive pulmonary disease. *Am.J.Respir.Crit.Care Med.* **163** 1087. PMID: 11316640.

**Akabane et al** (2006) Effects of salmeterol xinafoate and fluticasone propionate on immunological activation of human cultured mast cells. *Allergol.Int.* **55** 387. PMID: 17130681.

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