Product Name: Fluoxetine hydrochloride
Catalog No.: 0927
Batch No.: 5
CAS Number: 56296-78-7
EC Number: 260-101-2
IUPAC Name: N-Methyl-3-[(4-trifluoromethyl)phenoxy]-3-phenylpropylamine hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C_{17}H_{18}F_{3}NO.HCl
Batch Molecular Weight: 345.78
Physical Appearance: White solid
Solubility: DMSO to 100 mM
            water to 10 mM
Storage: Store at RT
Batch Molecular Structure:

2. ANALYTICAL DATA

Melting Point: Between 158 - 159°C
HPLC: Shows 99.7% purity
^1H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

<table>
<thead>
<tr>
<th>Element</th>
<th>Theoretical</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>59.05</td>
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<tr>
<td>Hydrogen</td>
<td>5.54</td>
<td>5.57</td>
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<tr>
<td>Nitrogen</td>
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<td>3.9</td>
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</tbody>
</table>
**Product Name:** Fluoxetine hydrochloride  
**CAS Number:** 56296-78-7  
**IUPAC Name:** N-Methyl-3-[(4-trifluoromethyl)phenoxy]-3-phenylpropylamine hydrochloride  

**Description:**  
Selective serotonin reuptake inhibitor. Binds to the human 5-HT transporter with a Kᵢ of 0.9 nmol/l and is between 150- and 900-fold selective over 5-HT₁₄, 5-HT₂₅, H₁, α₁, α₂-adrenergic, and muscarinic receptors. Antidepressant. Induces differentiation of neuronal precursors, enhancing neuronal characteristics.

**Physical and Chemical Properties:**  
- **Batch Molecular Formula:** C₁₇H₁₉F₃NO.HCl  
- **Batch Molecular Weight:** 345.78  
- **Physical Appearance:** White solid  
- **Minimum Purity:** >99%  
- **Batch Molecular Structure:**

![Molecular Structure](image)

**Storage:** Store at RT  
**Solubility & Usage Info:**  
- DMSO to 100 mM  
- Water to 10 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.

**Licensing Information:**  
Sold with the permission of Eli Lilly and Company

**References:**  