1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $\text{C}_{21}\text{H}_{23}\text{ClFNO}_2\text{HCl}$

Batch Molecular Weight: 412.33

Physical Appearance: White solid

Solubility: ethanol to 10 mM with gentle warming

DMSO to 25 mM with gentle warming

Storage: Store at RT

2. ANALYTICAL DATA

HPLC: Shows >99.4% purity

$^1$H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

<table>
<thead>
<tr>
<th></th>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Nitrogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical</td>
<td>61.17</td>
<td>5.87</td>
<td>3.4</td>
</tr>
<tr>
<td>Found</td>
<td>61.18</td>
<td>5.81</td>
<td>3.3</td>
</tr>
</tbody>
</table>
**Product Name:** Haloperidol hydrochloride  
**Catalog No.:** 0931  
**EC Number:** 200-155-6  
**Batch No.:** 4

**IUPAC Name:** 4-[4-(4-Chlorophenyl)-4-hydroxy-1-piperidinyl]-1-(4-fluorophenyl)-1-butanone hydrochloride

**CAS Number:** 1511-16-6

---

**Description:**
Dopamine antagonist with selectivity for D₂-like receptors (Kᵢ values are 1.2, ~ 7, 2.3, ~ 80 and ~ 100 nM for D₂, D₃, D₄, D₁ and D₅ receptors respectively). Subtype-selective NMDA antagonist.

**Physical and Chemical Properties:**
- **Batch Molecular Formula:** C₂₁H₂₂ClFNO₂.HCl
- **Batch Molecular Weight:** 412.33
- **Physical Appearance:** White solid
- **Minimum Purity:** >99%

**Solubility & Usage Info:**
Ethanol to 10 mM with gentle warming  
DMSO to 25 mM with gentle warming

**Storage:** Store at RT

**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:**
- Merck Index 12 4629.

---

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

bio-techne.com  
info@bio-techne.com  
techsupport@bio-techne.com  

North America  
Tel: (800) 343 7475

China  
info.cn@bio-techne.com  
Tel: +86 (21) 52380373

Europe Middle East Africa  
Tel: +44 (0)1235 529449

Rest of World  
www.tocris.com/distributors  
Tel:+1 612 379 2956