1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{15}H_{22}NCl.\text{HCl}.\frac{1}{2}H_2O$

Batch Molecular Weight: 297.27

Physical Appearance: White solid

Solubility:
- Water to 50 mM
- DMSO to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:

![Molecular Structure Image]

2. ANALYTICAL DATA

TLC: $R_f = 0.4$ (Dichloromethane:Methanol [9:1])

Melting Point: At 95°C

HPLC: Shows 100% purity

$^1$H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

<table>
<thead>
<tr>
<th>Component</th>
<th>Theoretical</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>60.61</td>
<td>60.32</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>8.14</td>
<td>7.95</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>4.71</td>
<td>4.4</td>
</tr>
</tbody>
</table>
**Product Name:** BTS 54-505 hydrochloride  
**Catalog No.:** 2322  
**Batch No.:** 1

**CAS Number:** 84484-78-6  
**IUPAC Name:** 1-(4-Chlorophenyl)-α-(2-methylpropyl)cyclobutanemethanamine hydrochloride

**Description:**
Potentely active primary amine metabolite of sibutramine (Cat. No. 2290), exhibits a similar pharmacological profile to the parent compound. Inhibits serotonin and noradrenalin reuptake more potently than sibutramine in vitro. Reduces food intake in rodents following i.c.v. administration and increases energy expenditure via thermogenesis in vivo.

**Physical and Chemical Properties:**
- Batch Molecular Formula: C15H22NCl.HCl·½H₂O
- Batch Molecular Weight: 297.27
- Physical Appearance: White solid
- Minimum Purity: >99%

**Storage:** Desiccate at RT

**Solubility & Usage Info:**
- water to 50 mM
- 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:**