Product Name: Lofepramine
CAS Number: 23047-25-8
IUPAC Name: 1-(4-Chlorophenyl)-2-[[3-(10,11-dihydro-5H-dibenz(Z)[b,f]azepin-5-yl)propyl]methylamino]ethanone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( C_{26}H_{27}N_2OCl \)
Batch Molecular Weight: 418.97
Physical Appearance: Light yellow solid
Solubility: DMSO to 75 mM, ethanol to 10 mM
Storage: Store at +4°C

2. ANALYTICAL DATA

Melting Point: At 104°C
HPLC: Shows >99.2% purity
\(^1\)H 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>74.54</td>
<td>74.34</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>6.50</td>
<td>6.47</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>6.69</td>
<td>6.69</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
**Product Name:** Lofepramine  
**Catalog No.:** 2545  
**Batch No.:** 1  
**CAS Number:** 23047-25-8  
**IUPAC Name:** 1-(4-Chlorophenyl)-2-[[3-(10,11-dihydro-5H-dibenzo[b,f]azepin-5-yl)propyl]methylamino]ethanone  

**Description:**  
Serotonin and noradrenalin re-uptake inhibitor (SNRI) that is metabolized to desipramine. Produces inhibition of liver tryptophan pyrollase activity in vitro and displays antidepressant properties in vivo.

**Physical and Chemical Properties:**  
- **Batch Molecular Formula:** C\textsubscript{20}H\textsubscript{22}N\textsubscript{2}O\textsubscript{4}Cl  
- **Batch Molecular Weight:** 418.97  
- **Physical Appearance:** Light yellow solid  
- **Minimum Purity:** >99%  

**Chemical Structure:**

![Chemical Structure](image)

**Storage:** Store at +4°C  
**Solubility & Usage Info:**  
- DMSO to 75 mM  
- Ethanol 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.

**References:**  