

Certificate of Analysis

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Product Name: Clomipramine hydrochloride

Catalog No.: 0457

Batch No.: 6

CAS Number: 17321-77-6

EC Number: 241-344-3

IUPAC Name: 3-Chloro-10,11-dihydro-*N,N*-dimethyl-5*H*-dibenz[*Z*][*b,f*]azepine-5-propanamine hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₉H₂₃ClN₂.HCl

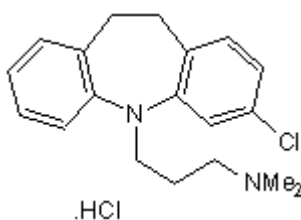
Batch Molecular Weight: 351.32

Physical Appearance: White solid

Solubility: water to 100 mM

Storage: Store at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.4% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	64.96	6.89	7.97
Found	65.22	6.98	8.09

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

Product Information

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Description:

Potent, selective 5-HT uptake blocker. Antidepressant. Binds to the human 5-HT transporter with a K_i of 0.05 nmol/l.

Physical and Chemical Properties:

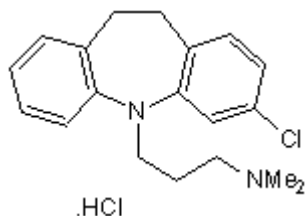
Batch Molecular Formula: $C_{19}H_{23}ClN_2.HCl$

Batch Molecular Weight: 351.32

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

water 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:

Owens et al (1997) Neurotransmitter receptor and transporter binding profile of antidepressants and their metabolites. *J.Pharmacol.Exp.Ther.* **283** 1305. PMID: 9400006.

Ortiz and Artiga (1992) Effects of monoamine uptake inhibitors on extracellular and platelet 5-hydroxytryptamine in rat blood: different effects of clomipramine and fluoxetine. *Br.J.Pharmacol.* **105** 941. PMID: 1387022.

McTavish and Benfield (1990) Clomipramine. An overview of its pharmacological properties and a review of its therapeutic use in obsessive compulsive disorder and panic disorder. *Drugs* **39** 136. PMID: 2178909.

Merck Index **12** 2447.

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