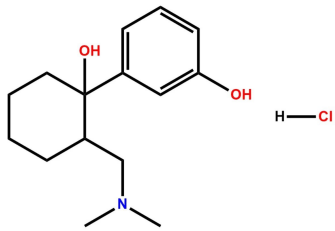


## CERTIFICATE OF ANALYSIS

Date: 19-06-2026

<b>Product Name</b>	<b>Tramadol EP Impurity D (HCl salt)</b>		
<b>Chemical Name</b>	(1RS,2RS)-2-[(dimethylamino)methyl]-1-(3-hydroxyphenyl)cyclohexan-1-ol hydrochloride		
<b>Structure</b>			
<b>Batch No.</b>	-	<b>CAS No.</b>	185453-02-5 ; 80456-81-1 (free base)
<b>Analysis Date</b>	-	<b>Retest Date</b>	3
<b>Mol. Formula</b>	$C_{15}H_{23}NO_2 : HCl$	<b>Molecular Wt.</b>	249.4 : 36.5
<b>Long term Storage Condition</b>	Store at 2-8 °C in well closed container		
<b>Handling and Transit Condition</b>	25-30 °C in well closed container		

Test	Result
Appearance	-
Solubility	-
<sup>1</sup> H-NMR	Conforms to structure
MASS	Conforms to structure
Chromatographic Purity	>90%

**Note: This material should be used for research purpose and not for human or animal consumption. Any patent applicable for this product in any country is not applicable for this analytical standard/research chemical.**

	Prepared By	Checked By	Approved By
<b>Signature</b>			
<b>Date</b>			

### CLEANCHEM LABORATORIES LLP

Plot No. A-737/2, TTC Industrial Area, MIDC Khairane, Navi Mumbai, Maharashtra, INDIA- 400710

 sales@cleanchemlab.com 
  +91-9324132198 
  www.cleanchemlab.com