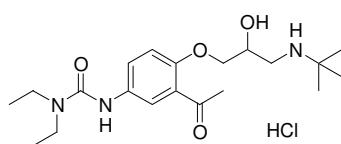




Certificate of Analysis

Axon Catalogue ID: 1159 **Batch Number:** 1
Product Name: Celiprolol hydrochloride
Alternative Name(s): N.A.
IUPAC Name: 3-(3-Acetyl-4-(3-(tert-butylamino)-2-hydroxypropoxy)phenyl)-1,1-diethylurea hydrochloride

Structure:



Amount:

CAS number(s): 56980-93-9 (parent), 57470-78-7 (HCl (1:1))
Molecular Formula: C₂₀H₃₃N₃O₄.HCl **Molecular Weight:** 415.95
Batch Molecular Formula: C₂₀H₃₃N₃O₄.HCl **Batch Molecular Weight:** 415.95
Appearance: Off-white solid **Observed mp:** 196.1 - 198.2 °C
TLC (R_f): - N.A.
Chemical Purity: 98.4%
Optical Purity (ee): N.A.
¹H-NMR (300 MHz): Analytical data confirm chemical structure
Mass Spec: Analytical data confirm chemical structure
Microanalysis: Calculated: C 57.75, H 8.24, N 10.10; Found: C ND, H ND, N ND
Storage Conditions: Store at -20 °C

Solubility Data:	Solvent	Solubility (mg/ml)	Solubility (mM)	Remarks
	Water	41.6	>100 mM	
	0.1N NaOH (aq)			Not Tested
	0.1N HCl (aq)			Not Tested
	DMSO	41.6	>100 mM	
	EtOH			Not Tested

Remarks:

QC Date: 15-06-2018

The purity of Axon Ligands is confirmed by HPLC, MS, NMR and/or microanalysis. Analytical data are available upon request. Request can be submitted by e-mail to info@axonmedchem.com indicating Catalogue ID and Batch number.

Caution: Not fully tested. For research purposes only