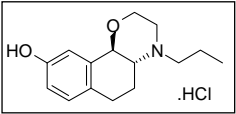




Certificate of Analysis

Axon Catalogue ID	1071	Batch Number:	2																								
Product Name:	(+) -PHNO hydrochloride																										
IUPAC Name:	(4aR,10bR)-4-Propyl-3,4,4a,5,6,10b-hexahydro-2H-naphtho[1,2-b][1,4]oxazin-9-ol hydrochloride																										
Structure:		Amount:	700 mg																								
CAS number:	99705-65-4	Batch MW:	283.80																								
Batch Molecular Formula:	C ₁₅ H ₂₁ NO ₂ .HCl	Observed m.p.:	293 °C																								
Appearance:	White Crystalline	Wavelength for purity check:	281 nm																								
TLC (R_f):	0.5 DCM/MeOH [9:1]	Optical Rotation [α]_D:	56° (c=1, MeOH)																								
Chemical Purity:	>99%																										
Optical Purity (ee):	99%																										
¹H-NMR (300 MHz):	Analytical data confirm chemical structure																										
Mass Spec:	Analytical data confirm chemical structure																										
Microanalysis:	Not available																										
Storage Conditions:	For long term storage we advise to keep below +4°C																										
Solubility Data:	<table><thead><tr><th>Solvent</th><th>Solubility (mg/ml)</th><th>Solubility (mM)</th><th>Remarks</th></tr></thead><tbody><tr><td>Water</td><td>13.10</td><td>46.16</td><td>aq soluble</td></tr><tr><td>1eq. NaOH</td><td></td><td></td><td></td></tr><tr><td>1eq. HCl</td><td></td><td></td><td></td></tr><tr><td>DMSO</td><td></td><td></td><td></td></tr><tr><td>EtOH</td><td></td><td></td><td></td></tr></tbody></table>	Solvent	Solubility (mg/ml)	Solubility (mM)	Remarks	Water	13.10	46.16	aq soluble	1eq. NaOH				1eq. HCl				DMSO				EtOH					
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Remarks:																											
Quality controller:	M. Brandsma, MSc	Date:	9/18/2009																								

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 Axon Catalogue ID and Batch number.

Caution: Not fully tested. For research purposes only