

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing:	2024-08-22 11:46:28
Date of Next Testing:	2026-08-22 11:46:28
Product Name:	<b>(R)-RuCl[(p-cymene)(BINAP)]Cl</b>
CAS Number:	145926-28-9
Specifications & Purity:	>90.0%(HPLC)
Lot #:	K2201688
SKU #	<b>R138244</b>
Version	<b>1</b>
<b>Analysis #:</b>	<b>402826</b>
Storage Temperature:	Store at 2-8°C, Argon charged

Parameter	Limit Values	Result
Specific Rotation [α] <sub>D</sub> 20/D(c=0.5 in CHCl <sub>3</sub> )	510-610 (°)	609.90°
Carbon by Elemental Analysis	66.3-73.3 (%)	67.50%
Purity(HPLC)	90-100 (%)	98.60000%
Appearance (R138244)	Yellow to Dark yellow to Orange to Brown Powder or Crystal	Yellow to Dark yellow to Orange to Brown Powder or Crystal
Phosphorus NMR Spectra	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager