

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2022-10-10 10:23:31

Date of Next Testing: 2025-10-09 10:23:31

Product Name: **Diacetato{(S)-(-)-5,5'-bis[di(3,5-xylyl)phosphino]-4,4'-bi-1,3-benzodioxole}ruthenium(II)**

CAS Number: 944450-50-4

Specifications & Purity: $\geq 97\%$

Lot #: I2214574

SKU # **D282689**

Version **1**

Analysis #: **099730**

Storage Temperature: Store at 2-8°C, Argon charged

Parameter	Limit Values	Result
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in CHCL}_3)$	-550~-450 (°)	-504.38700 °
Carbon	60.6-66.9 (%)	62.88000 %
Proton NMR spectrum	Conforms to structure	Conforms to Structure
Phosphorus NMR Spectra	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager