

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-05-24 15:08:08
 Date of Next Testing: 2027-05-23 15:08:08
 Product Name: **RuCl₂[(R)-binap][(R,R)-dpen]**
 CAS Number: 212143-23-2
 Specifications & Purity: ≥98%
 Lot #: E2318439
 SKU #: **D123138**
 Version: **0**
 Analysis #: **209401**
 Storage Temperature: Store at -20°C, Argon charged

Parameter	Limit Values	Result
Ruthenium (Ru)	9.6-10.5 (%)	9.72 %
Carbon by Elemental Analysis	66.1-72.3 (%)	68.20 %
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Appearance (D123138)	Yellow to Tan Powder or Crystalline Solid	Yellow to Tan Powder or Crystalline Solid



John Su
QA & QC Manager