

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2022-12-09 17:32:50
 Date of Next Testing: 2026-12-08 17:32:50
 Product Name: **Dichloro(p-cymene)ruthenium dimer**
 CAS Number: 52462-29-0
 Specifications & Purity: $\geq 97\%$ (T)
 Lot #: B1915086
 SKU #: **D102667**
 Version: **0**
 Analysis #: **165678**
 Storage Temperature: Protected from light, Room temperature, Desiccated, Cool

Parameter	Limit Values	Result
Purity (Argentmetric Titration)	96.5-103.5 (%)	97.12600 %
Carbon by Elemental Analysis	37.8-40.6 (%)	38.90000 %
Ruthenium (Ru)	32.5-33.5 (%)	32.90000 %
Appearance (D102667)	Red to brown crystals or chunks	Red to brown crystals or chunks
Infrared spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager