

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2022-07-18 17:26:37
 Date of Next Testing: 2026-07-17 17:26:37
 Product Name: **Dichloro(p-cymene)ruthenium dimer**
 CAS Number: 52462-29-0
 Specifications & Purity: $\geq 97\%$ (T)
 Lot #: G2215221
 SKU #: **D102667**
 Version: **0**
 Analysis #: **096077**
 Storage Temperature: Protected from light, Room temperature, Desiccated, Cool

Parameter	Limit Values	Result
Carbon by Elemental Analysis	37.8-40.6 (%)	38.70000 %
Ruthenium (Ru)	32.5-33.5 (%)	33.48000 %
Purity (Argentmetric Titration)	96.5-103.5 (%)	96.51000 %
Appearance (D102667)	Red to brown crystals or chunks	Red to brown crystals or chunks
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager