

## Certificate of Analysis

Date of Testing: 2022-01-25 18:05:48  
Date of Next Testing: 2024-01-25 18:05:48  
Product Name: **Dimethylammonium Dichlorotri( $\mu$ -chloro)bis(S)-(-)-2,2'-bis(diphenylphosphino)-1,1'-binaphthyl]diruthenate(II)**  
CAS Number: 199541-17-8  
Specifications & Purity: 95%  
Lot #: C2011130  
SKU #: **S138436**  
Analysis: **070324**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Purity(NMR)	95-100 (%)	95.10%
Appearance (S138436)	Light orange to dark brown powder	Light orange to dark brown powder
ICP: Confirms Ru Component	Confirmed	Confirmed
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager