

## Certificate of Analysis

Date of Testing: 2024-06-14 13:26:30

Date of Next Testing: 2027-06-14 13:26:30

Product Name: (R)-(-)-1-[(S)-2-[Bis(4-trifluoromethylphenyl)phosphino]ferrocenyl]ethyl-di-t-butylphosphine

CAS Number: 246231-79-8

Specifications & Purity: 97%

Lot #: F2412020

SKU #: R282426

Version: 1

Analysis #: 046341

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

| Parameter                                                           | Limit Values              | Result                    |
|---------------------------------------------------------------------|---------------------------|---------------------------|
| Purity(HPLC)                                                        | 97-100 (%)                | 98.99700 %                |
| Specific Rotation [α] <sub>20/D</sub> (c=c=0.6, CHCl <sub>3</sub> ) | -335~-330 (°)             | -334.25000 °              |
| Appearance(R282426)                                                 | Orange crystalline powder | Orange crystalline powder |
| Proton NMR spectrum                                                 | Conforms to structure     | Conforms to Structure     |



John Su  
QA & QC Manager