

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2025-12-10 13:42:10

Date of Next Testing: 2028-12-09 13:42:10

Product Name: (S)-(-)-2,2'-Bis(di-p-tolylphosphino)-6,6'-dimethoxy-1,1'-biphenyl

CAS Number: 133545-25-2

Specifications & Purity:  $\geq 97\%$ ,  $\geq 99\%$ (ee)

Lot #: K2524080

SKU #: S281836

Version: 1

Analysis #: 260405

Storage Temperature: Room temperature

| Parameter              | Limit Values                            | Result                                  |
|------------------------|-----------------------------------------|-----------------------------------------|
| Purity(HPLC area)      | 97-100 (%)                              | 97.30000 %                              |
| Enantiomeric Excess    | 99-100 (%)                              | 99.00000 %                              |
| Phosphorus NMR Spectra | Conforms to Structure                   | Conforms to Structure                   |
| Proton NMR spectrum    | Conforms to Structure                   | Conforms to Structure                   |
| Appearance(S281836)    | White to Almost white powder to crystal | White to Almost white powder to crystal |



John Su  
QA & QC Manager