

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-06-20 17:17:23

Date of Next Testing: 2026-06-19 17:17:23

Product Name: **(1S,2S)-N,N-Bis[2-(diphenylphosphino)benzyl]cyclohexane-1,2-diamine**

CAS Number: 174677-83-9

Specifications & Purity: 95% , 98%ee

Lot #: F23131707

SKU #: **S282228**

Analysis: **223851**

Storage Temperature: Argon charged

| Parameter | Limit Values | Result |
|------------------------|-----------------------|-----------------------|
| Purity(HPLC area) | 95-100 (%) | 98.00% |
| Enantiomeric Excess | 98-100 (%) | 99.00000% |
| NMR Spectrum 1H | Conforms to Structure | Conforms to Structure |
| Phosphorus NMR Spectra | Conforms to Structure | Conforms to Structure |



John Su
QA & QC Manager