

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

# Certificate of Analysis

Date of Testing: 2022-06-10 18:33:09

Date of Next Testing: 2024-06-09 18:33:09

Product Name: (R)-(+)-2,2'-Bis(diphenylphosphino)-6,6'-dimethoxy-1,1'-biphenyl

CAS Number: 133545-16-1

Specifications & Purity: ≥97%

Lot #: F2205479

SKU #: R396776

Version: 2

Analysis #: 072747

Storage Temperature: Protected from light, Room temperature, Argon charged

| Parameter                                              | Limit Values          | Result                |
|--------------------------------------------------------|-----------------------|-----------------------|
| Melting point                                          | 211-218 (°C)          | 214.38000 °C          |
| Purity(HPLC)                                           | 97-100 (%)            | 97.03000 %            |
| Specific Rotation [α] <sub>20</sub> /D(c=1 in Toluene) | 91-113 (°)            | 101.44000 °           |
| Proton NMR spectrum                                    | Conforms to structure | Conforms to Structure |



John Su  
QA & QC Manager