

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

# Certificate of Analysis

Date of Testing: 2023-03-21 09:11:59

Date of Next Testing: 2026-03-20 09:11:59

Product Name: (8aS)-18-Hydroxy-8,9-diphenyl-18-oxide-diphenanthro[4,3-d:3'',4''-f][1,3,2]dioxaphosphepin

CAS Number: 871130-17-5

Specifications & Purity: ≥98%, ≥99%(ee)

Lot #: C2310272

SKU #: H282303

Version: 1

Analysis #: 175461

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

| Parameter           | Limit Values                                          | Result                                                |
|---------------------|-------------------------------------------------------|-------------------------------------------------------|
| Purity(HPLC area)   | 98-100 (%)                                            | 98.00000 %                                            |
| Enantiomeric Excess | 99-100 (%)                                            | 99.00000 %                                            |
| Appearance(H282303) | White to Tan to off-white to yellow Crystal to Powder | White to Tan to off-white to yellow Crystal to Powder |
| NMR Spectrum 1H     | Conforms to Structure                                 | Conforms to Structure                                 |
| 31P NMR spectrum    | Conforms to structure                                 | Conforms to Structure                                 |



John Su  
QA & QC Manager