

## Certificate of Analysis

Date of Testing: 2023-04-08 12:38:24

Date of Next Testing: 2027-04-07 12:38:24

Product Name: **(DHQD)2PHAL**

CAS Number: 140853-10-7

Specifications & Purity:  $\geq 95\%$

Lot #: C2324870

SKU #: **D111399**

Version: **0**

Analysis #: **173186**

| Parameter   | Limit Values                              | Result                                    |
|---|---|---|
| Specific Rotation [ $\alpha$ ] <sub>D</sub> <sup>22</sup> (c=1 in MeOH) | -272.5--252.5 (°)                         | -259.40 °                                 |
| Purity(HPLC)  | 95-100 (%)                                | 98.03400 %                                |
| Appearance (D111399)  | Off-White to Light Yellow Powder or Solid | Off-White to Light Yellow Powder or Solid |
| Proton NMR spectrum   | Conforms to Structure                     | Conforms to Structure                     |



John Su  
QA & QC Manager