

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

# Certificate of Analysis

Date of Testing: 2025-07-24 17:21:35

Date of Next Testing: 2029-07-23 17:21:35

Product Name: 4,4',4'',4'''-(Porphine-5,10,15,20-tetrayl) tetrakis(benzoic acid)(TCPP)

CAS Number: 14609-54-2

Specifications & Purity: ≥97%

Lot #: G2512027

SKU #: P115336

Version: 1

Analysis #: 454657

Storage Temperature: Room temperature, Desiccated, Cool

| Parameter                        | Limit Values                                   | Result                                         |
|----------------------------------|------------------------------------------------|------------------------------------------------|
| Purity(Neutralization titration) | 96.5-103.5 (%)                                 | 97.24000 %                                     |
| Purity(HPLC)                     | 97-100 (%)                                     | 98.00400 %                                     |
| Appearance (P115336)             | Dark Blue to Purple to Black Powder to Crystal | Dark Blue to Purple to Black Powder to Crystal |
| NMR (1H-NMR)                     | complies                                       | complies                                       |
| Infrared spectrum                | Conforms to Structure                          | Conforms to Structure                          |



John Su  
QA & QC Manager