

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2025-09-02 15:15:51
Date of Next Testing: 2028-09-01 15:15:51
Product Name: [4-(9H-Carbazol-9-yl)butyl]phosphonic acid(4PACz)
CAS Number: 20999-36-4
Specifications & Purity: $\geq 98\%$
Lot #: H2527437
SKU #: P1324821
Version: 1
Analysis #: 518373
Storage Temperature: Store at 2-8°C, Protected from light, Argon charged

| Parameter | Limit Values | Result |
|--------------------------|-----------------------|-----------------------|
| Purity(HPLC area) | 98-100 (%) | 98.26400 % |
| NMR Spectrum 1H | Conforms to Structure | Conforms to Structure |
| LC-MS for identification | Conforms | Conforms |



John Su
QA & QC Manager