

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-06-13 13:17:32  
Date of Next Testing: 2028-06-12 13:17:32  
Product Name: **4,4'-Bis(N-carbazolyl)-1,1'-biphenyl**  
CAS Number: 58328-31-7  
Specifications & Purity:  $\geq 98\%$   
Lot #: F2403365  
SKU #: **B113207**  
Version: **0**  
Analysis #: **074506**  
Storage Temperature: Room temperature

Parameter	Limit Values	Result
Melting point	281-285 (°C)	281.49000 °C
Nitrogen by Elemental Analysis	5.4-6.1 (%)	5.63 %
Purity(HPLC)	98-100 (%)	98.32100 %
Carbon by Elemental Analysis	86.1-92.4 (%)	88.83 %
Appearance (B113207)	White to Off-White to brown Solid, Powder, Crystal	White to Off-White to brown Solid, Powder, Crystal
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager