

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

# Certificate of Analysis

Date of Testing: 2025-10-20 10:56:44

Date of Next Testing: 2029-10-19 10:56:44

Product Name: **Tris(4-carbazoyl-9-ylphenyl)amine (TCTA)**

CAS Number: 139092-78-7

Specifications & Purity:  $\geq 98\%$

Lot #: J2509803

SKU #: **T123987**

Version: **0**

Analysis #: **575010**

Storage Temperature: Room temperature, Argon charged

| Parameter                      | Limit Values                                                      | Result                                                            |
|--------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------|
| Carbon by Elemental Analysis   | 85.2-88 (%)                                                       | 87.66600 %                                                        |
| Nitrogen by Elemental Analysis | 6.9-8.1 (%)                                                       | 7.48500 %                                                         |
| Purity(HPLC)                   | 98-100 (%)                                                        | 99.14800 %                                                        |
| Appearance (T123987)           | White to Grey to Orange to Green Powder or Crystals and/or Chunks | White to Grey to Orange to Green Powder or Crystals and/or Chunks |
| Proton NMR spectrum            | Conforms to Structure                                             | Conforms to Structure                                             |



John Su  
QA & QC Manager