

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-05-27 13:52:35

Date of Next Testing: 2026-05-26 13:52:35

Product Name: 5'-Bromo-[2,2'-bithiophene]-5-carbonitrile

CAS Number: 176787-96-5

Specifications & Purity: 98%

Lot #: E2318388

SKU #: B405264

Analysis: 207648

| Parameter           | Limit Values                            | Result                                  |
|---------------------|-----------------------------------------|-----------------------------------------|
| Melting point       | 158-168 (°C)                            | 163.58000 °C                            |
| Purity(GC)          | 98-100 (%)                              | 98.98 %                                 |
| NMR Spectrum 1H     | Conforms to Structure                   | Conforms to Structure                   |
| Appearance(B405264) | White to Light yellow powder to crystal | White to Light yellow powder to crystal |

A handwritten signature in black ink that reads "John Su".

John Su  
QA & QC Manager