

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2026-06-04 13:24:13

Date of Next Testing: 2029-06-03 13:24:13

Product Name: **(S)-1-Boc-2-Butyl-Piperazine**

CAS Number: 169447-76-1

Specifications & Purity:  $\geq 97\%$

Lot #: E2629141

SKU #: **B728395**

Version: **3**

Analysis #: **635083**

Storage Temperature: Store at 2-8°C, Protected from light

| Parameter                                             | Limit Values          | Result                |
|-------------------------------------------------------|-----------------------|-----------------------|
| specific rotation $[\alpha]_{20/D}(C=1, \text{MeOH})$ | 44.5-48.5 (°)         | 47.58000°             |
| Purity(GC)                                            | 97-100 (%)            | 97.75700%             |
| NMR Spectrum 1H                                       | Conforms to Structure | Conforms to Structure |
| LC-MS for identification                              | Conforms              | Conforms              |



John Su  
QA & QC Manager