

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-09-06 17:38:27

Date of Next Testing: 2027-09-05 17:38:27

Product Name: **(R)-1-Boc-3-methylpiperazine**

CAS Number: 163765-44-4

Specifications & Purity: 98%

Lot #: H2325142

SKU #: **B123470**

Analysis: **257677**

Storage Temperature: Argon charged

Parameter	Limit Values	Result
Purity(GC)	98-100 (%)	99.67 %
Melting point	40-47 (°C)	46.82000 °C
Specific Rotation [α] ₂₀ /D(c=1 in CHCL ₃)	14-18 (°)	17.98°
Appearance (B123470)	White to pale cream crystals or powder	White to pale cream crystals or powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure

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

John Su
QA & QC Manager