

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-10-13 12:22:06  
Date of Next Testing: 2026-10-12 12:22:06  
Product Name: **(R)-(-)-1-Methyl-3-pyrrolidinol**  
CAS Number: 104641-60-3  
Specifications & Purity: 98%  
Lot #: I2222707  
SKU #: **M119144**  
**Analysis: 122872**  
Storage Temperature: Store at 2-8°C, Argon charged

Parameter	Limit Values	Result
Purity(Nonaqueous Titration)	97-100 (%)	98.80%
Purity(GC)	98-100 (%)	99.95%
Density (20°C)	0.981-0.986	0.98
Specific Rotation [α] <sub>20</sub> /D(c=1 in CHCL <sub>3</sub> )	-8--5 (°)	-7.14°
Refractive index n <sub>20</sub> /D	1.463-1.467	1.46
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Appearance (M119144)	Colorless to yellow brown liquid	Colorless to yellow brown liquid



John Su  
QA & QC Manager