

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

# Certificate of Analysis

Date of Testing: 2022-12-15 13:59:43

Date of Next Testing: 2026-12-14 13:59:43

Product Name: (S)-(+)-1-Methyl-3-pyrrolidinol

CAS Number: 104641-59-0

Specifications & Purity: ≥98%

Lot #: L2209476

SKU #: M121670

Version: 1

Analysis #: 149610

Storage Temperature: Room temperature, Argon charged

| Parameter                                                         | Limit Values                        | Result                              |
|-------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| Refractive index n <sub>20</sub> /D                               | 1.463-1.467                         | 1.46450                             |
| Specific Rotation [α] <sub>20</sub> /D(c=1 in CHCL <sub>3</sub> ) | 4-8 (°)                             | 7.78000 °                           |
| Purity(Nonaqueous Titration)                                      | 98-100 (%)                          | 99.36200 %                          |
| Purity(GC)                                                        | 98-100 (%)                          | 99.21400 %                          |
| Density (20°C)                                                    | 0.981-0.986                         | 0.98300                             |
| Appearance (M121670)                                              | colorless to yellow to brown liquid | colorless to yellow to brown liquid |
| Proton NMR spectrum                                               | Conforms to structure               | Conforms to Structure               |



John Su  
QA & QC Manager