

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-09-02 17:30:56  
Date of Next Testing: 2027-09-02 17:30:56  
Product Name: **(R)-(+)-1,1'-Binaphthyl-2,2'-diamine**  
CAS Number: 18741-85-0  
Specifications & Purity:  $\geq 99\%$   
Lot #: H2428026  
SKU #: **R138409**  
Version: **0**  
Analysis #: **097477**

Parameter	Limit Values	Result
Purity(HPLC)	98-100 (%)	99.63100 %
Specific Rotation $[\alpha]_{20/D}(c=1$ in Pyridine)	154-158 ( $^{\circ}$ )	155.94 $^{\circ}$
Melting point	240-244 ( $^{\circ}$ C)	242.48000 $^{\circ}$ C
Appearance (R138409)	white to off-white to pink to yellow-red powder	white to off-white to pink to yellow-red powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager