

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-05-08 09:38:01
Date of Next Testing: 2027-05-07 09:38:01
Product Name: (S)-(-)-1,1'-Binaphthyl-2,2'-diamine
CAS Number: 18531-95-8
Specifications & Purity: $\geq 99\%$
Lot #: D23261079
SKU #: S138404
Analysis: 053069

Parameter	Limit Values	Result
Purity(HPLC)	98-100 (%)	99.96900 %
Specific Rotation [a] _D ²⁰ (c=1 in Pyridine)	-158--154 (°)	-154.16 °
Melting point	241-246 (°C)	243.04000 °C
Appearance (S138404)	White to Tan to Purple Powder, Crystals or Chunks	White to Tan to Purple Powder, Crystals or Chunks
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager