

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-10-19 13:26:48

Date of Next Testing: 2024-10-08 13:26:48

Product Name: **(S)-BINOL**

CAS Number: 18531-99-2

Specifications & Purity:  $\geq 99\%$

Lot #: E1529044

SKU #: **B100620**

Version: **0**

Analysis #: **145783**

Storage Temperature: Store at 2-8°C

| Parameter                                               | Limit Values                     | Result                           |
|---------------------------------------------------------|----------------------------------|----------------------------------|
| Melting point                                           | 205-211 (°C)                     | 207.60000 °C                     |
| Specific Rotation $[\alpha]_{20/D(c=1 \text{ in THF})}$ | -38--33 (°)                      | -35.30000 °                      |
| Purity(HPLC)                                            | 99-100 (%)                       | 99.02200 %                       |
| Appearance (B100620)                                    | white to grey powder or crystals | white to grey powder or crystals |
| Proton NMR spectrum                                     | Conforms to Structure            | Conforms to Structure            |



John Su  
QA & QC Manager