

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-08-22 10:15:10  
Date of Next Testing: 2027-08-22 10:15:10  
Product Name: **N-Cbz-cis-4-Hydroxy-L-proline methyl ester**  
CAS Number: 57653-35-7  
Specifications & Purity: 97%  
Lot #: K2113255  
SKU #: **I171068**  
Version: **2**  
Analysis #: **402546**  
Storage Temperature: Room temperature

| Parameter  | Limit Values                                    | Result  |
|--|---|---|
| specific rotation $[\alpha]_{20/D}(C=1\%, \text{in } \text{CDCl}_3)$ | -24--16 (°)                                     | -21.20000 °                                     |
| Purity(GC)   | 97-100 (%)                                      | 98.30 %   |
| Appearance(I171068)  | White to Off-White Powder or Crystalline Powder | White to Off-White Powder or Crystalline Powder |
| Proton NMR spectrum  | Conforms to structure                           | Conforms to Structure                           |



John Su  
QA & QC Manager